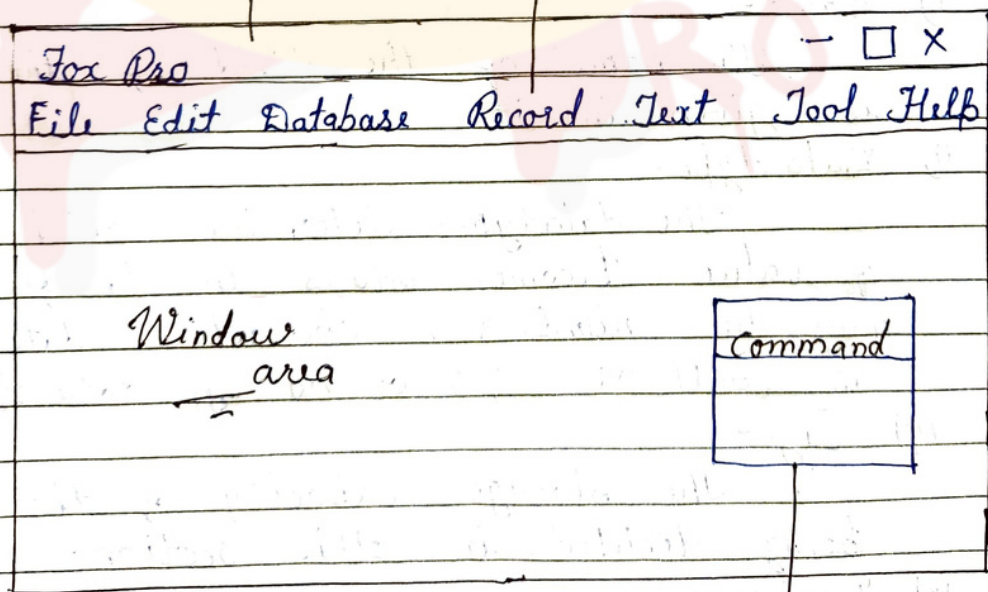


FOX PRO



In computer based permanent data storage concept when requires in which the data stores in tabular format then one of the application named ~~For~~ "Fox Pro" was widely used earlier days. The fox pro was developed by and organised by named "FoxBase" corporation in 1980's. At the initial time level of operations the working platform is 'DOS' therefore CUI (character user interface) environment becomes used. In 1995, the DOS based 'Fox Pro' converted into windows mode that means it supports GUI (graphical user interface) mode of operations. When it works on CUI mode then a single table based database concept is used, whereas when the platform is GUI its behavior is of RDBMS types.

Title Bar Menu Bar



Command window

- The fox pro window divided itself into four component that is title bar, menu bar, command area and output area.
- When a user need to activate the command for execute the program then command window area becomes used.

* Create command -

FOX PRO
COMMANDS

In fox pro database when a table need to created then the creat command along with the database table name is written in command window. The extension of database is .ebf. Once the command is be executed, a window command is open where a different information related to table creations becomes appear-

i) Name -

The name of the field of the table is given in it.

ii) Data type -

The datatypes determines which types of value becomes stores in the field, it may be numbers, character, date, memo as well as yes or no data type.

iii) Size -

The storage capacity of the field being decided in this section.

iv) Decimal -

When the numeric value is of fraction type then how many digits becomes

available as scale value using it.

v) Insert -

When a new column area is created inside the table then it is used.

vi) Delete -

To remove the previously created column it is used.

Name	Data type	Size	Decimal
			OK Cancel Insert Delete

Data type-

In the 'FoxPro', the data type is the determination that decides which type and size of value stored in the field. The data-type is decided at the time of table creation when the field is decided for it.

When the name of the table or name of the field being given then certain rules being followed that is -

- The name of table or field may be alphanumeric.
- The length goes up to 10 character long.
- The symbol, space, keywords & commands are not allowed to give the name.
- The underscore(_) only be given as symbol to put the name.

$$\overset{1}{P} \overset{2}{.} \overset{3}{3} \overset{4}{4} \overset{\text{Scale}}{\text{}}$$

 Date _____
 Page _____

- v) The duplicate table in the same storage location as well as duplicate column name do not be allowed in the same table.

The field, when created inside the table then it is necessary that certain data type must be allowed which decides the storage.

i) Character -

When the alphanumeric value need to be stored inside the field then it is used. The max^m 254 character being stored in a single record value. By default it contain 10 characters space.

ii) Numbers / Numeric

There are two different numeric values becomes stored inside the field of the table i.e decimal & fraction. The total size of numeric value is 20 digits long. If the decimal value being inputted then the length goes up to 18-digits long whereas the fraction contains 18-digits of ~~data~~ presegior and 2-digits scales

iii) Date -

The date & time value when need to store then this data type is to be used. The date value b/w ranges b/w Jan 1, 1900 to Dec 31, 9999 whereas the time value is in 24-hour format.

iv) Memo -

Whenever multi line of data need to be stored inside the field then it is used. The max^m 4000 characters are stored and 254 characters are default representation. The memo field value stored inside a file whose extension is ".fpt". To get the value of memo field the edit or browse command is used.

v) Logical -

When the boolean type of value need to stored in the field then it is used. The value is in form of Y or N.

2) Modi struct command -

It is one of the command that having two different operations -

→ When the 'FOXPRO' opens first time or no any data base table in use then it will open a dialog box in which the list of the tables names are available. Select any one of them as per the requirement to open it.

→ When the table is in used then it open the structure of the table in which we can insert a new field, remove previously available field, change in the data type if the column do not contains in the record as well as the size of the column to.

Syn - "Modify structure"
or
"Modi struct"

3) Display structure command -

Once a table is created and the user need to get the information that where the table becomes stores, no. of records available in the table, date of last update, in the table code page no. i.e memory address no. where table is available along with the fields names and their data type then used this command.

Syn - "Display structure"

4) Use command -

When the table is earlier created and a user need to work on the table, structure or record then 'use' command along with the name of the table is given.

Syn - "Use student"

5) List command -

In foxpro working environment, whenever the list of records need to be display selectively, collectively, with or without command then 'list' command is to be used. There are various ways becomes used along with the 'list' command -

→ To show overall records from the table, the 'list' only be used for it.

Syn - Use student ↵

List ↵

→ Whenever one can need to show the specify the column value from the table then it is used.

Syn- List Roll, Class ↵

→ When certain condition need to be apply on the variable value then the 'for' clause is used to put the condition on the specify field value. The relational operators are used to do so.

Ex. Show the roll and name from the student table whose marks obtained is greater than 500

Syn- Use student ↵

List roll, name for mobt > 500 ↵

* Logical operator-

When the query the processing depends on a boolean specification i.e. true or false then the concept of logical operator becomes used.

The three different types of logical operators becomes available-

i) . and . -

The .and. operator is one of the operator that performs two different tasks-

→ It is used to verify the range of the field value and it returns to when the value is in ranged.

Ex. Show the roll & name from student table then their mobt is b/w 490 to 600.

Syn - Use student ↵

List roll, name for mobt ≥ 490 . and . mobt ≤ 600

→ It is used to combine two separate conditions and returns true when both of the conditions are true.

Ex. Show the roll & name from student table when class is BCAI and marks less than 500.

Syn - Use student <

List roll, name for class = 'BCAI' and marks < 500

ii) .OR. -

When more than one conditions being applied on either a single field or multiple field then this operator is used. If any one of the conditions returns true then the resultant is true otherwise false.

Ex Show the list of Roll and Name when class is BCAI or BCAIII from the student table.

Syn - Use student <

List name, roll for class = 'BCAI' or class = 'BCAIII'

iii) .NOT. -

When it is used then resultant is true when condition is false and vice-versa.

Ex Show the list of roll when marks obtained is greater than 600.

Syn Use student <

List roll for .NOT. marks < 600 <

5) Print command -

When a user need to print the data of a table by the printer then following query statement is to be written -

Syn - Use student ↵

List to Print ↵

6) Append command -

In the fox pro database environment, whenever a record need to be inserted within the database table then 'append' command is to be used.

Syn - Use student ↵

append ↵

→ When a blank space related to the record need to be generated in which the record becomes inserted next time then 'blank' keyword is used along with append command.

Syn - append blank ↵

7) Insert command -

When a user need to make input operation of record in b/w certain records then 'insert' command is to be used.

Syn - Use student ↵

Insert record(record no) ↵

If a new record need to be inserted before any record then 'before' keyword is written along with the insert command.

Syn - insert before(record no) ↵

8) Edit/change command-

In the foxpro, whenever a user need to change certain specified record directly by pressing the cursor or open the edit window in which cursor movement send the control to specified record

Syn - Edit record 3 / change record 3 ←
or Edit 3 / change 3
or Edit / change (It opens all records)

9) Go/goto command-

In the foxpro, whenever a record being to the control need to send at any specified record then this command is to be used.

Syn - Go 3 or goto 3 or go record 3
or goto record 3

10) Delete command-

In the foxpro, whenever a record being temporarily deleted i.e. it can be recalled if a user required then delete command is to be used and a asterics (*) sign becomes placed before the record no. that can be deleted by the user.

Syn - [Delete record 2] ←
or [go to 2 ←]
[delete ←]

11) Recall command-

In the database, when record becomes deleted logically then to retain such record, this command is to be used.

syn - [Recall Record 2] ↵

or [goto 2 ↵]
[Recall ↵]

12) Pack command -

Whenever a user need to remove any specified record from the database table permanently then after using 'delete' command when 'pack' command consecutively then record become delete permanently.

syn - [Use student ↵]
[Delete record 3 ↵]
[Pack ↵]

13) Locate command -

When the record need to be removed, display not their record no inserted of that the record value then this command is to be used.

Q Remove the record whose roll belongs to '2'.

syn - [Locate for roll = 2 ↵]
[Delete ↵]

14) Display command -

In foxpro, the visibility of the record when need to set then one of the command known as 'display' provided by the foxpro. The basic difference b/w the 'list' & 'display' command is that the list shows all the records at a time whereas the display command shows the up to one screen at a time. The display shows the current working record on which the user lastly work on it.

[Display ↵]

→ When all the records of the database table need to view at a time then a keyword known as 'all' is written along with display command.

[Display all ↵]

→ When one can need to view the specified fields value of the table then the field name is written along with the display command.

[Use student ↵
Display roll, mobt ↵]

→ To show the field value by sitting certain condition on field then 'for' clause is used along with the field on which condition becomes foot on the field value.

[Display Roll, Name for mobt > 400] ↵

→ When more than one fields having certain starting characters becomes equal then to access all of them at a time, this particular command becomes used along with the fields and 'like' keyword.

Q Show the records from student table whose name is started with 'R'.

[Use student ↵
Display fields like R* ↵]

15) Copy file command -

Whenever a user need to copy the content of a file along with their the structure then 'copy file' command becomes used.

[Copy file student to stud ←]
old file name New file name

16) Rename command -

When the name of the table need to be changed then rename command is to be used.

[Rename student to student 1 ←]
old New

17) Delete file -

To remove the table permanently from the foxpro storage location this particular command is to be used.

[Close databases ←]
[Delete file student 1 ←]

18) Copy to command -

In the foxpro, whenever a user need to copy the database table into another table, then this particular command is to be used. To make the copy operation it is necessary that the file is must be open.

Q Copy the student table into 'stud' table?

Use student ←

Copy to stud ←

→ When the specified no. of columns from one table to another table need to be copy then the fields and 'like' keyword becomes used along with the field name i.e being copied by the user from currently used table.

Q Copy the roll, name from student table to stud table.

[Use student ←
Copy to stud fields like Roll, name ←]

→ We can use the wild card (*, ?) to represent the fields of the table when the starting, middle, or end letter is common in more than one fields.

Q Copy the fields from student table whose name started with capital 'R'.

[Use student ←
Copy to stud fields like R* ←]

→ When a user need to copy those fields ^{that} do not matches ^{the} given specification then a keyword becomes introduce to do so is 'except'.

Q Copy the fields known ^{from} student table in which all the columns are available instead of started with 'R' into stud table.

[Use student ←
Copy to stud fields like except R* ←]

→ When a user need to put certain condition on the field value a/c to which the records can be copied from one table to another 'for' clause is written along with relational or logical operator.

Q Copy the records from student table to stud table whose marks obtained greater than 400.

[Use student ←
Copy to stud for marks > 400 ←]

Copy structure command -

In the foxpro, whenever a user need to copy the structure of a table not their records then the concept of this particular command is to be used.

[Use student ←
Copy structure to stud ←
new table]

→ When the specified fields need to be copy into a new table with their structure only it by the use of fields like statement along with the command.

Q Copy the structure of roll & marks field of student table into stud table?

Use student ←

Copy structure to stud fields like roll, marks

→ When multiple fields are available whose starting is by the common character then it is necessary to put the field name i.e not need to be copy into other file then 'except' keyword is used along with the copy structure command.

Q Copy the structure of fields started with 'R' except remark from student to stud table?

Use student ←

Copy structure to stud fields like R* except remarks

* Function -

The function is a concept in foxpro database that having a representative name along with their parameter that is used to perform the specific task or the of objectivity.

In foxpro, the function being divided into different category like text, numeric, date & time, database.

Text -

When a user works on set of characters then in foxpro database it is known as text function. There are a list of text functions available in foxpro i.e.

1) Left(text, number) -

Whenever certain characters from left side need to be accessed then this particular function becomes used.

? Left("Computer", 3) ←

2) Right(text, number)

? Whenever the certain no. of characters need to be accessed from the right side of the text then it is used.

? Right("Program", 4) ←

3) Substring(Text, number, number) / substr(text, num, num)

When certain no. of characters need to be accessed from a position this particular function becomes used.

? Substr ("Computer", 4, 3) ←

4) Upper(text) -

When the lower case letters of the text need to convert into upper case then this particular function becomes used.

? upper ("program") ←

5) Lower(text) -

When the upper case letter of the text need to convert into lower case then it is used.

? lower ("BCA") ←

6) Ltrim(text) -

In foxpro the unnecessary space from the left side of the text, when need to be remove then then concept of this function is to be used.

? Ltrim ("Computer") ←

7) Rtrim(text) -

To remove the unnecessary space from the right side of the text, it is used.

? Rtrim ("Computer ")

8) Alltrim(text) -

It is used to remove the unnecessary space from both left and right side of the text.

? Alltrim (" Computer ")

* `Len(text)` -

It is used to return the length of the given word.

? `len("Data")`

* `Asc(text)` -

To show the ascii value of the given letter or first letter of the text it is used.

? `Asc("A")`

? `Asc("Moti")`

1st letter of ASCII value is output

* `Chr(Number)` -

It is used to return the character representation of numeric ascii value (0-255).

? `Chr(248)`

* `Replicate(text, number)` -

When the given character of word need to be replicated as many times as as a user requires then it is used.

? `Replicate("Computer", 4)`

* `Padl(Padding) = (text, number, text)` -

When certain character need to attach to left side whose number is decided by the user by including their parameter then it is used.

? `Padl("BCA", 10, "*")`

* `Padr(text, num, text)` -

When certain character need to attach to the right side of text it is used.

? `Padr("BCA", 5, "-")`

* `Padc (text, number, text)` -

When the certain content is in middle and specified no. of characters in both left and right side need to place then it is use.

? `Padc ("BCA", 5, "-")`

* `Isalpha(text)` -

When a user need to verify that the inputted character belongs to the alphabet or not is by use of it.

? `Isalpha ("A")` Output - True

* `Isdigit(text)` -

To verify the input char belongs to digit or not.

? `Isdigit ("1")` T.

* `Isupper(text)` -

Check the input char belongs to upper case letter or not.

? `Isupper ("d")` F.

* `Islower(text)` -

? `Islower ("A")` F.

* **Numeric functions** -

In `foxpro`, there are a no. of functions becomes available i.e. collectively works on numeric values called, numeric function.

i) `Abs (Number)` -

To get the absolute value of the inputted no., it is used.

? `abs (-20)` = 20

ii) Sqrt(Num) -

To find out the square root value of the given no., then it is used.

? sqrt(25) output-5.

iii) Mod(Num) -

When the modulus (remainder) value need to be get first parameter with second, then it is used.

? Mod(5, 2) 1.

iv) Exp(Num) -

When the exponential value of the given no. by raising the power 2.71 then it is used.

? Exp(2) $\leftarrow$

v) log(Num) -

To find the logic value of the given no. this function is used.

? log(100) $\leftarrow$

vi) Log₁₀(Num) -

To find out the logic value of a no. by putting the base as '10' this function is used.

? log₁₀(100) $\leftarrow$

vii) Sign(Num) -

This function returns three different values i.e. '1' when positive value is inputted, '-1' when negative value is inputted, '0' when 0 is inputted.

? sign(-20) $\leftarrow$ -1

viii) $\text{Max}(\text{Num}, \dots)$ -

To findout the max^m value of from the given list of values it is used.

? $\text{Max}(2, 8, 21, 22) \leftarrow$

ix) $\text{Min}(\text{Num}, \dots)$ -

To findout the min^m value from the given list of value, it is used. - ? $\text{min}(2, 8, 3) \leftarrow$

x) $\text{Round}(\text{Num}, \text{significant})$ -

To round a fraction value, scale representation from a specified position as mention in the parameters then this particular function is used.

? $\text{Round}(123.567, 2)$

123.57

xi) $\text{Ceilling}(\text{Number})$ -

From the fraction value, when nearest scale representation it is used.

? $\text{ceilling}(10.3)$

* Date and time function -

In the foxpro database environment, whenever date and time value related operation being performed then

The day value ranges b/w Jan 1, 1900 to Dec 31, 9999. The hour value is in 24 hour format. The functions are -

i) $\text{Date}()$ -

It is used to return, the ~~current~~ today's date time of the system.

? $\text{date}() \leftarrow$

ii) $\text{Time}()$ - It is used to return, the ~~to~~ current time of the system.

? $\text{time}() \leftarrow$

iii) Day(date()) -

To extract the day value from given date it is used.

? day(date()) ←

or da = "09/08/2021"

? da(date()) ←

iv) Month(date()) -

To extract the month value from the given date value, it is used.

? month(date()) ←

or ? month(da) ←

v) Year(date()) -

To extract the year value from the given date value, it is used.

? year(date()) ←

or ? year(da) ←

vi) DOW(date()) -

To return the week day number as per the date, this particular function is to be used.

? DOW(date()) ←

vii) CDOW(date()) -

To return the weekday name as per the given date, this particular command is to be used.

? CDOW(date()) ←

viii) CMONTH(date()) -

It returns the month name value as per the given date.

? Cmonth(date()) ←

ix) Hours (Time) -

Empno.	Designation	salary	Employee table
1001	Clerk	52000	
1002	Operator	46000	
1003	Clerk	53000	
1004	Accountant	72000	
1005	Operator	45000	

* Sum command -

When a user input add values available in a column then this particular command becomes used.

Use employee ↵

Sum salary ↵

We can put certain condition on the fields related to the field on which command can be implement to find the sum.

Sum salary for designation = "Clerk" ↵

* Average command -

To find the average value of the given field, it is used.

Use employee ↵

Average salary ↵

We can put certain condition on a field or to which average need to be calculated.

Average salary for designation = "Operator" ↵

* Count command -

To count the how many records are available in the database table it is used.

Use employee ↵

Count ↵

We can put the condition either on text field or numeric field to count the specific field.

Count for designation = "Accountant" ↵

Count for salary > 50000 ↵

* Sort command -

In foxpro, when the records are available in database table and a user need to arrange the records either in ascending or descending order based on certain field this particular command is to be used. The arrangement can be either ascending or descending in numeric or characters types of the field.

Use employee ↵

Sort to new-table on field name ↵

Q Arrange the records of employee table in ascending order of salary and stored in 'emp' table?

Use employee $\leftarrow$
Sort to emp on salary $\leftarrow$

When the records are arranged in descending order of the field value then "ld" is written along with field name.

Q Arrange the records of student table in descending of their marks obtained in

Use student $\leftarrow$
Sort to stud on marks/d $\leftarrow$

* The sort always creates a new table in which stored records are stored.

* Index command-

In the foxpro database, whenever a table is created within the table need to be created, then the index command is to be used. The new next table is used to increase the speed of data processing due to direct reference of main table. When the index table is created then the "idx" is used for the table. The syntax is -

Index on field name to table name $\leftarrow$

Q Create the index on roll field of the student table and stored in stud.idx file in ascending

Use student $\leftarrow$
index on roll to stud.idx $\leftarrow$

To arrange the value of the field in index table into descending order "ld" is used along with the field name that creates and index.

Use student ←

index on roll / d to stud. idx ←

* Programming environment in foxpro -

In foxpro programming environment, a user can work both with procedural concept as well as the database concept to perform the operations. It is necessary to open an interface where the program syntax is written as well as to execute the program construct to get the resultant.

i) Modi comm -

In foxpro, to open the program interface this particular command is written along with the file name in command window.

modi comm file name ←

To save the program syntax in the file "ctrl+w" and ~~ctrl+x~~_{end} become pressed.

ii) Do command -

Once the program file become save then to execute the program syntax 'Do' command along with program file name is written.

Do Program file name ←

* The extension of program file of foxpro is ".prg".

* Operator of FoxPro -

In programming environment there are different types of calculation are available with the available variable value or database table field value. To perform the calculation the concept of operator becomes used.

"The operator are symbolic structure or words through which a user can perform different types of arithmetical or logical operation by writing an operation".

* Types of operator -

i) Arithmetic operator -

$+$, $-$, $*$, $/$, $\%(\text{mod})$, $^$ or $**$

ii) Logical operator -

and, or, not

iii) Relational operator -

$<$, $>$, $<=$, $>=$, $=$, $!=$ (not equal to), $<>$, $\#$

iv) Date & time operator -

$\{ \}$, $()$, $+$, $-$

v) Concatenation operator -

$+$

* Input-Output Statement -

In foxpro, a user can make the input and output operations in the variable by using certain statement.

i) Input statement -

In foxpro, when a user need to input the value within the numeric variable then input statement is used. To separate the message with variable name 'to' clause is used.

Input "Enter the roll number" to roll

In foxpro, when a user need to make input the value within the text type variable then "Accept" statement is used. To separate the message with variable 'to' clause is used.

Accept "Enter the name" to name.

ii) Output statement-

In foxpro, when a user need to make output then two symbolic structure becomes used that is -

- ? - When it is used then the output becomes available and cursor is in same line.
- ?? - When it is used the output becomes displayed and cursor is in next line.

* Store command-

In foxpro, when global variable becomes used and a user need to initialize the variable with certain value then store command is used.

store 3.14 to pi
store "BCA1" to course

Q Write a program that accept radius of circle. find out the area & perimeter?

store 3.14 to pi

Input "Enter the radius of circle" to r

area = $\pi * r * r$

perimeter = $2 * \pi * r$

? area, perimeter

2) Write a program that accept the no. of items and their price, Show the net price?
Input "Enter the no. of item:" to I
Input "Enter the price of one item:" to P
 $Netprice = I * P$
? Netprice

Q WAP that accept distance and time, show the value of speed?
Input "Enter the distance travelled by the body:" to d
Input "Enter the time taken by the body:" to t
 $speed = d/t$
? speed

Q WAP that accept marks of five subject show the average value?
Input "Enter the marks of first sub:" to a
Input "_____ second —:" to b
Input "_____ third —:" to c
Input "_____ fourth —:" to d
Input "_____ fifth —:" to e
 $S = a + b + c + d + e$
 $D = S/5$
? "Average", D

Q WAP that accept three digits numbers, find out the sum of digits?
Store 0 to S
Input "Enter three digits numbers:" to n
 $d = n \% 10$
 $n = \text{int}(n/10)$
 $S = S + d$ $S = S + d + n$
 $d = n \% 10$? S
 $n = \text{int}(n/10)$

Q WAP that accept three digits number, show the reverse of digits?

Input "Enter three digit num:" to n

$a = \text{int}(n/100)$

$b = n \cdot 100$

$c = \text{int}(b/10)$

$d = b \cdot 10$

$A = d * 100 + c * 10 + a * 1$

Or Input "Enter the three digit num:" to n

$a = n \cdot 10$

$b = \text{int}(n/10)$

$c = b \cdot 10$

$d = \text{int}(n/100)$

$R = a * 100 + c * 10 + d * 1$

* The asterisk (*) sign is used to create the comment in foxpro. The translator do not execute the line.

* To get the decimal part of the fraction the $\text{int}()$ is used.

* Conditional statement :-

When certain condition is to be inputted on variable value then the concept of conditional statement is used.

The conditional statement basically uses relational or logical operators to put the condition.

* When the condition is being placed then after execution it results the true or false type of returning.

1) If statement -

This statement is used to verify the condition of variable value and execute the expression when the condition returns true only.

→ If condition then
Expressions
endif

Q WAP that accept the marks of any student add 5 marks when it is less than 250?

Input "Enter the marks:" to m

if $m < 250$ then

$m = m + 5$

? m

endif

Q WAP that accept basic salary of an employee if the basic salary is greater than 10000 then 40% allowance and 10% tax is deducted. Find the net salary of employee?

Input "Enter the basic salary:" to sal

if $sal > 10000$ then

$net_salary = sal + sal * .4 - sal * .1$

? "net_salary", net_sal

endif

2) If else statement -

When certain condition is being applied on the variable and the user need to execute the expression both in true or false sense then it is used. The expressions written just below if statement executes when the condition is true otherwise the expression written below it else execute.

```

→ If condition then
    expressions
else
    expressions
endif

```

Q WAP that accept any number then check it is even or odd?

```

Input "Enter the number:" to num
if num % 2 = 0 then
    ? "Even"
else
    ? "Odd"
endif

```

Q WAP that accept any number if it is divisible by 5 then show their square value

```

Input "Enter the number which is divisible by 5:" to n
if n % 5 = 0 then
    n = n^2
    ? "Square value", n
endif

```


Q Write a program that accept cost and selling price, check it is in profit and loss and how much?

Input "Enter the cost price:" to a

Input "Enter the selling price:" to b

if $a < b$ then

income = $b - a$

? "Profit", income

else

income = $a - b$

? "loss:", income

endif

Q WAP that accept any year value then check it is leap year or not?

Input "Enter the year:" to y

if $y \% 4 = 0$ then

? "Leap year: yes"

else

? "leap year: no"

endif

Q WAP that accept the name of the item, if it is 'Monitor' then give 10% discount in their price. Show the final price?

Accept "Enter the ^{name} price of item" to i

Input "Enter the price of item" to P

if i = "monitor" then

$P = P - P * 0.1$

? "final price", P

endif

3) If---else if---else---endif statement -

When more than one condition is being implement on a single variable then the concept of if else if statement is used.

* The expression written below the condition executes when the condition returns true otherwise next condition is to be verified. When no any condition returns true then the expression written below else executes.

The syntax is -

If condition then

expression

else

if condition then

expressions

else

if condition then

expression

else

expression

endif

* WAP that accept marks of a student show their division. If marks is greater than 540 then first, between 480 - 539 then second, 420 - 479 then third and < 420 then fail.


```
Input "Enter the marks:" to m
if m >= 540 then
    ? "first"
else
    if m >= 480 and m <= 539 then
        ? "second"
    else
        if m >= 420 and m <= 479 then
            ? "third"
        else
            ? "fail"
        endif
    endif
endif
```

* Nested if statement -

When more than one conditional statement is written consecutively then the concept of nested if statement is used. To execute the expression written below it all the above condition are true.

```
If condition then
If condition then
    expression
endif
endif
```

Q WAP that accept three numbers, find out the max^m from them?

store a to m

input "Enter the 1st num:" to a

input "enter the 2nd num:" to b

input "enter the 3rd num:" to c

if $a > b$ then

if $a > c$ then

? a

endif

endif

if $b > a$ then

if $b > c$ then

? b

else

? c

endif

endif

Q WAP that accept any character then check it is upper, lower, digit or symbol.

Accept "enter any character" to ch

if $ch \geq "A"$ and $ch \leq "Z"$

? "upper case"

else

if $ch \geq "a"$ and $ch \leq "z"$

? "lower case"

else

if $ch \geq "0"$ and $ch \leq "9"$

? "digit"

else

? "symbol"

end if
end if

Q WAP that accept week day no. Show the weekday name?

clear

input "enter the day number:" to n

if $n = 1$ then

? "~~monday~~" "sunday"

else

if $n = 2$ then

? "~~to~~" "monday"

else

!

if $n = 7$ then

? "saturday"

endif (7 times)

Q WAP that accept age of three person, show which one is younger.

clear

input "enter the age of first person" to a

input "enter the age of second person" to b

input "enter the age of third person" to c

if $a < b$ then

if $a < c$ then

? "a"

endif

endif

if $b < a$ then

if $b < c$ then

? "b"

else

? "c"

endif

endif

Q WAPTA any number show it is +ve, -ve or 0?

```

clear
input "enter the number:" to n
if n < 0 then
  ? "negative"
else
  if n > 0 then
    ? "positive"
  else
    if n = 0 then
      ? "zero"
    endif (3 times)
  endif
endif

```

Q WAPTA three angles of a triangle then show it is right angle, equilateral triangle and isoscale triangle?

```

clear
input "enter the first angle:" to a
input "enter the second angle:" to b
input "enter the third angle:" to c
if a = 90 .or. b = 90 .or. c = 90 then
  ? "Rightangle triangle"
else
  if a = b .and. b = c .and. c = a then
    ? "Equilateral triangle"
  else
    if a = b .or. a = c .or. b = c then
      ? "Isoscale triangle"
    endif
  endif
endif
endif

```


* Looping statement/control flow statement/iterative statement
When a single line or multiple lines of expressions need to be executed more than one time then the concept of looping statement is used. Once the expressions being executed then it becomes execute another time or not is decided by the foxpro translator, hence it is known as control flow statement.

* Significance of loop -

- i) The number of variables in the program being reduced.
- ii) The size of the program becomes reduced.
- iii) The efficiency of the program execution becomes more.
- iv) The complexity of the program gets increased.

* Category of looping statement -

The entire looping statement is divided into two different categories that is -

i) Based on placement of condition -

a) Entry level loop -

The looping statement in which the condition is placed at the top of the loop is known as entry level loop. The expression written in the body of the loop only be executed when the given condition returns true.

b) Exit level loop -

When the condition of the loop is at the bottom location then it is known as exit level loop. The expression gets executed at least once either the condition is false.

2) Based on number of iteration -

a) Finite loop -

The looping statement in which the number of iterations, that is earlier fixed in nature is known as finite loop. Every finite loop having three different stages that initialization, condition check as well as increment or decrement.

b) Infinite loop -

The loop in which no. of iterations is not earlier fixed is known as infinite loop. To convert the infinite loop into finite loop we can put the condition on variable value as well as use a separate counter that decides whether the loop iterates or not.

* Do while loop -

The do while is an example of entry level looping statement that having both the finite and infinite type of execution.

→ Finite -

It executes the loop until and unless the counter based condition returns true.

Syntax - Initialization

do while condition

expression

increment / decrement

enddo

→ Infinite →

We can place the condition on the variable value and loop iterates until and unless the condition on the variable returns true.

Syntax - do while condition
expression
enddo

* Do while .T. -

This loop is executed until and unless the expression written below the loop returns true otherwise loop terminates.

Syntax - do while .T.
expression
enddo

* Do while !eof() -

This loop is used whenever a user works on database table records. The loop iterates until and unless the table contains record.

Syntax - do while !eof()
expression
enddo

Q WAPTA 10 numbers find out the sum of even and odd numbers separately?

store 1 to i

store 0 to e

store 0 to od

do while i <= 10

input "enter the number" to n

If $n \% 2 = 0$ then

$e = e + n$

else

$od = od + n$

endif

$i = i + 1$

enddo

? e, od

Q 1) WAP that accept 10 numbers find out the maximum from inputted numbers?

Q 2) WAP that accepts 10 numbers count how many +ve, -ve or zero.

1) clear

store 1 to i

store 0 to m

do while $i \leq 10$

input "enter the number" to n

if $n > m$ then

$m = n$

endif

$i = i + 1$

enddo

? "Max", m

2) clear

store 1 to i

store 0 to p

store 0 to ne

store 0 to z

do while $i \leq 10$

input "enter number:" to n


```

if n > 0 then
    p = p + 1
else
    if n < 0 then
        ne = ne + 1
    else
        z = z + 1
    endif
endif
i = i + 1
enddo
? " +ve", p
? "-ve", ne
? "zero", z
    
```

Q WAPTA any number, show their factorial?

```

clear
store 1 to f
input "Enter the no:" to n
do while n > 0
    f = f * n
    n = n - 1
enddo
? "factorial:", f
    
```

Q WAPTA any number, show their reverse value?

```

clear
store 0 to r
input "enter the number:" to num
do while num > 0
    d = num % 10
    num = int(num / 10)
    r = r * 10 + d
enddo
? "Reverse of digits:", r
    
```

Q. MAP that accept decimal number convert into binary number?

clear

store 0 to bin

store 1 to i

input "enter the decimal number:" to n

do while $n > 0$

$d = n \div 2$

$n = \text{int}(n/2)$

$\text{bin} = \text{bin} + d * i$

$i = i * 10$

enddo

? "Binary=", bin

MAP that accept any number, Check it is pallindrom or not?

clear

store 0 to x

input "enter the number" to n

$x = n$

dowhile $x > 0$

$d = x \div 10$

$x = \text{int}(x/10)$

$x = x * 10 + d$

enddo

if $n = x$ then

? "Pollindrom"

else

? "Not pollindrom"

endif

$$153 = 1^3 + 5^3 + 3^3$$

Armstrong No. = 153

WAP to any number, then check it is armstrong number or not?

clear

store 0 to x

Input "enter the number" to n

x = n

do while x > 0

d = x % 10

x = int(x / 10)

r = r + d * d * d

enddo

if n == r then

? "Armstrong"

else

? "Not armstrong"

WAP to any number count, how many digits are available

clear

store 0 to s

Input "enter the number" to n

do while n > 0

d = n % 10 n = int(n / 10)

s = s + 1 c = c + 1

enddo

? c

* In the foxpro programming environment whenever the infinite loop is in the processing need to set and the user pause the processing in infinite state then exit statement becomes used

```
do while .T.  
expression  
enddo
```

WAPTA numbers, find out the maximum until & unless even negative value being inputted?

clear

store 0 to m

do while .T.

Input "enter the no." to n

if $n < 0$ then

exit

endif

if $n > m$ then

$m = n$

endif

? m

- 1) WAP that show armstrong no. b/w 1 to 1000.
- 2) WAP that accept any no., show their hexadecimal representation?
- 3) WAPTA a list of numbers, show the sum of even or and odd placed no. until & unless user input 0.


```

1) Clear
store 0 to S
store 1 to i
do while i <= 1000
    x = i
do while x > 0
    d = x % 10
    x = int(x/10)
    S = S + d * d * d
enddo
endif
enddo
if i = S then
    ? i
endif

```

```

7) Clear
store space(10) to ch
Input "Enter any no:" to n
do while n > 0
d = n % 16
n = int(n / 16)
if d = 10 then
ch = ch + "A"
else
if d = 11 then
ch = ch + "B"
else
if d = 12 then
ch = ch + "C"
endif
endif
endif
endif
enddo

```

```

3) Clear
store 0 to c
store 0 to od
do while T.
input "enter the number" to n
if n = 0 then
    exit
else
    if n % 2 = 0 then
        c = c + n
        od = od + n
    endif
endif
enddo
? c, od

```

Q WAPTA number, convert into single digit.

clear

store 0 to a

input "enter to num" to n

do while n > 9

do while n > 0

d = n % 10

n = int (n/10)

a = a + d

enddo

n = a

a = 0

enddo

a = a % 10

Q WAPTA a list of numbers, show the max from the list.

clear

store 0 to a

store 1 to i

input "enter the list of num" to lim

do while i <= lim

input "enter the number" to n

if n > a

a = n

endif

i = i + 1

enddo

a

Q. WAP to any string, check all the character are in alphabet or not?

clear

store 0 to c

store 1 to i

accept "enter the string" to st

do while $i \leq \text{len}(st)$

ch = substr(st, i)

if isalpha(ch)

for (for !

c = 0

else

c = 1

exit

endif

i = i + 1

enddo

if c = 0 then

? "alphabet"

else

? "not"

endif

WAP to any string, search any particular character availability?

clear

store 0 to c

store 1 to i

Accept "enter the string" to st

Accept "enter the character to search" to s

do while $i \leq \text{len}(st)$

ch = substr(st, i)

if ch = s then

Pallindrom word

→ MOM → MO

Date _____
Page _____

```

c = 1
end if
i = i + 1
enddo
if c = 0 then
? "Not found"
else
? "found"

```

- Q1) WAPTA any string, check it is pallindrom or not
 2) WAPTA any string, convert the upper case letter into lower case and vice-versa.

```

2) clear
store space(20) to s
store space(20) to a
store 1 to i
accept "enter the string" to st
do while i <= len(st)
ch = substr(st, i, 1)
if islower(ch) then
a = a + upper(ch)
else isupper(ch) then
a = a + lower(ch)
endif
s = s + a
i = i + 1
enddo
? a

```


Rg m, 1

13/01/20



Q WAPTA any string count how many consonants and vowel are available in.

store 0 to a

store 0 to c

store 1 to i

accept "enter the string" to st

do while $i \leq \text{len}(st)$

ch: $\text{substr}(st, i)$

if $\text{isalpha}(ch)$ then

if $ch = 'a' \cdot \text{or} \cdot ch = 'e' \cdot \text{or} \cdot ch = 'i' \cdot \text{or} \cdot ch = 'o'$

$\cdot \text{or} \cdot ch = 'u' \cdot \text{or} \cdot ch = 'A' \cdot \text{or} \cdot ch = 'E'$

$\cdot \text{or} \cdot ch = 'I' \cdot \text{or} \cdot ch = 'O' \cdot \text{or} \cdot ch = 'U'$

then $a = a + 1$

else

$c = c + 1$

endif

~~if~~ $i = i + 1$

if $c =$ enddo

? "Vowel", a

? "Consonant", c

Q WAPTA any string reverse the char of the string and show it?

Clear

store 0 to r

store 1 to i

accept "enter the string" to st

do while $i \leq \text{len}(st)$

~~ch = substr(st, i)~~

clear

store space(20) to r

Accept "enter the string" to st

$l = \text{len}(st)$

do while $l \geq 1$

ch = $\text{substr}(st, l)$

$r = r + ch$

$l = l - 1$

enddo

? r

2) WAPTA any string, check it is pallindrome or not?

clear

store a to c

store space(20) to x

x = ""

accept "Enter the string" to st

l = len(st)

do while l >= 1

ch = substr(st, l, 1)

x = x + ch

l = l - 1

enddo

if x = st then

? "Pallindrome"

else

? "Not"

endif

* For loop -

It is one of the looping statement in which the no. of iteration becomes set earlier and it can be executed one by one, more than one times of increment or decrement of counter of the loop. The syntaxes are-

1) for lower bond to upper bond
expression
endfor

2) for lower bond to upper bond step <n>
expression
endfor

3) for upper bond to lower bond step <-n>
expression
endfor

Q WAPTA any number, show their table?

~~clear~~
~~store~~ ~~do i~~
~~input~~ "enter any number", to n
~~for i~~

clear

~~store~~ ~~do i~~

input "enter any number" to n

for i: to 10

a = n * i

endfor ? a

~~print~~ a endfor

```
clear
store 1 to i
Input "enter the number" to n
for i to n
```

Q WAPTA 10 numbers count how many of them are odd and even?

```
clear store 0 to e
store 0 to od
for i = 1 to 10
  Input "enter any no." to n
  if n % 2 = 0 then
    e = e + 1
  else
    od = od + 1
  endif
endfor
? "e"
? "od"
```

Q WAPTA any no., show their factorial?

```
clear
store 1 to f
Input "enter any no." to n
for i = 1 to n
  f = f * i
endfor
? f
```

Q WAPTA generates the fibonacci series up to 10 terms (0 1 1 2 3 5 8 13 21 34)

Q WAPTA finds out the sum of the following series (1+2-3+4-5+---+n)

1) Store a to a
store 1 to b
? a, b
for i = 1 to b
c = a + b
a = b
b = c
?? c
endfor

2) store 1 to s
Input "enter the limit" to n
for i = 2 to n
if $i \times 2 = 0$ then
s = s + i
else
s = s - i
endif
endfor
? s

Q $\frac{1}{1}! + \frac{1}{2}! + \frac{1}{3}! + \dots + \frac{1}{n}!$

clear
store 0.0 to s
store 1 to f
Input "enter the limit" to n
for i = 1 to n
for j = i to 1 step -1
f = f * j
endfor
s = s + $\frac{1}{f}$
f = 1
endfor

Q $S = 1 + 4 + 9 + 16 + 25 + \dots + n$

clear
store 1 to s
Input "Enter the limit" to n
for i = 2 to n
s = s + (i * i)
endfor
? "total", s

Q # S = 1 + 2 + 2 + 3 + 3 + 3 + 4 + 4 + 4 + 4 - - -

clear

store 0 to S

~~store~~ Input "Enter a num" to n

for i = 1 to n

for j = 1 to i

S = S + i

endfor

endfor ? S

Q WAPTA any string count how many vowels and consonants are available in string?

clear

store 0 to V

store 0 to C

accept "Enter any string" to st

for i = 1 to len(st)

ch = substs(st, i)

if ch = "a" .or. ch = "e" .or. ch = "i"

.or. ch = "o" .or. ch = "u"

V = V + 1

else

C = C + 1

endif

endfor

? "Vowel", V

? "Consonant", C

* Do case ---- End case statement -

In foxpro programming whenever different programs or different types of operation when need to execute on the basis of choice value representation then the concept of this particular statement becomes used. The user input the choice value, when matches with case value then its expression go for execution. When no any choice being match then expression written below otherwise keyword gets executed. The syntax is -

```
Do case
case value
expression
case value
expression
otherwise
expression
endcase
```

Q WAPT having following sub-programs based on users choice execution -

- i) Inputted no is even or odd.
- ii) Show the table of inputted no.
- iii) Check no. is automorphic or not.
Otherwise user defined message being prompt.

Automorphic no. - $6^2 = 36$

$$5^2 = 25$$

$$25^2 = 625$$

$$7^2 = 49$$

```

Store i to c
store 1 to j
? "1. even or odd"
? "2. Automorphic"
? "3. Table"
Input "enter your choice" to ch
Do case
case ch = 1
  Input "enter any no." to n
  if  $n \% 2 = 0$  then
    ? "even"
  else
    ? "odd"
  endif

case ch = 2
  Input "enter the no." to n
  sq =  $n * n$ 
  x = n
  do while  $n > 0$ 
    c =  $c * 10$ 
    n = int( $n / 10$ )
  enddo
  r = mod(sq, c)
  if  $x = r$  then
    ? "Automorphic"
  else
    ? "Not"
  endif

otherwise
  ? "Choice don't match"
endcase
endcase

```

```

Case ch = 3
  Input "Enter the no" to n
  do while  $i < 10$ 
    ?  $n * i$ 
    i = i + 1
  enddo

```


Q What is catalog manager in foxpro?

In foxpro, there are a no. of operations related to database, procedural activities, general text, numeric as well as date time operations, customization of screen and output etc. The catalog of foxpro is responsible to categorise all the constituent component inside the foxpro database application. Once the foxpro environment gets started then catalog manager initiated itself and ^{enhance} ~~in~~ their.

Once a user write the foxpro command, procedural construct, function etc in command window then it compares with the foxpro catalog manager component and execute it to give the resultant. When the foxpro activates the first screen contain catalog manager from where a user select the type of operation performed in foxpro environment.

Q What is rush more technology in foxpro

The foxpro was developed by an organisation named foxbase in 1990. The CUI environment based operation becomes performed by the user in foxpro working environment. The processing speed of query statement or application program is slower in nature. The rush more technology of the foxpro speed up the data accessing in foxpro working environment. In foxpro, there is a concept called indexing through which we are going to increase the processing speed of the foxpro

data related operation. To activate the rushmore technology the computer compact indexing being created in which a separate table called index table is created by the user using creat index command. When the query statement or application program is written then the rush more technology works on index table not on the master table to collect the data. Due to that the processing speed becomes faster in nature.

Q Justify the foxpro in DBMS or RDBMS.
In initial days when the foxpro was installed then it supports a DOS platform to work therefore only one table behave as database based operation. Due to single table based operation, the DOS mode foxpro is an example of DBMS. In the previous version, there is no any process to combine two or more than two tables to maintain the data flow among them. Now a days the windows supportive mode of foxpro is available that having the feature of relation using set relation command. The visual foxpro when installed and operated then we have the facility to combine two or more than two tables to maintain the data flow among them. Now a day, the window mode of operation, foxpro behaves as RDBMS. In DOS based foxpro the table

are not created inside a database whereas the visual mode of foxpro supports the creation of table inside the database environment.

Now a days foxpro is not an example of DBMS but it works on RDBMS.

@ command -

In the foxpro working environment, whenever the screen formatting need to be performed then @ command becomes used. We know that the screen contains 24 rows and 80 columns for each row. The two different keywords becomes available along with @ command i.e.-

i) Say -

Whenever this particular keyword is used then a user can send the control at specified row and column either in form of message or value.

Eg:- @ 5,10 say "Nalanda college"

```
[ Store 20 to num  
  @ 6,15 say num
```

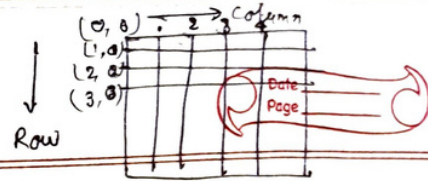
ii) Get -

Whenever a user need to make input within the specified variable then this particular keyword becomes used.

Eg:- @ 4,13 get radius

Row
↑
column
↑
(3, 10) say "comp")

(0, 2)



♀

Student marksheet

Roll
Name
Class
Mobt
Div
Per

clear

```
@ 31, 10 say "Student marksheet"
@ 31, 11 say "_____ "
@ 34, 14 say "Roll"
@ 34, 15 say "Name"
@ 34, 16 say "Class"
@ 34, 17 say "Mobt"
@ 34, 18 say "Div"
@ 34, 19 say "Per"
@ 50, 14 get ro
@ 50, 15 get na
@ 50, 16 get cl
@ 50, 17 get M

if m >= 540 then
    di = "first"
else if m >= 480 then
    di = "second"
else
    if m >= 420 then
        di = "third"
    else
        di = "fail"
    endif
endif
endif
endif
p = m/9
@ 50, 18 say di
@ 50, 19 say p
```



```
clear
store 0 to 80
store space (20) to na
store space (5) to cl
clear store 0 to m
```

```
@ 21, 10 say " Student marksheet"
```

```
@ 22, 10 say " _____"
```

```
@ 23, 10 say "roll"
```

```
@ 24, 10 say " Name"
```

```
@ 25, 10 say " Class"
```

```
@ 26, 10 say " mobt"
```

```
@ 27, 10 say " Div"
```

```
@ 28, 10 say " per"
```

```
read
```

```
@ 23, 20 get na
```

```
@ 24, 20 get na
```

```
@ 25, 20 get cl
```

```
@ 26, 20 get m
```

```
read
```

```
if m >= 540 then
  di = "first"
```

```
else
```

```
  if m >= 480 then
    di = "Second"
```

```
  else
```

```
    if m >= 420 then
      di = "Third"
```

```
    else
```

```
      di = "fail"
```

```
    endif
```

```
  endif
```

```
endif
```

```
P = m * 100 / 900
```

```
@ 27, 10 say di
```

```
@ 28, 10 say P
```

Q.

Nalanda Restaurant

Date -

Bill no. -

Item

Qty

Price

Veg chawmin

Egg chawmin

Chicken chilli

Paneer chilli

Total -

Clear

@ store 0 to veg

store 0 to VP

store 0 to egg

store 0 to ep

store 0 to C

store 0 to CP

store 0 to P

store 0 to PP

store 1 to bi

da = date()

@ 3,45 say "Nalanda Restaurant"

@ 4,40 say "

@ 5,30 say "date -"

@ 5,70 say "Bill no. -"

@ 6,35 say "Item"

@ 6,50 say "Quantity"

@ 6,65 say "Price"

@ 8,32 say "Veg chawmin"

@ 10,32 say "Egg chawmin"

@ 12,32 say "Chicken chilli"

@ 14,32 say "Paneer chilli"

@ 15,65 say "Total"

@ 5,80 get bi

@ 8,50 get ~~veg~~ veg

@ 8,65 get VP

@ 10,50 get egg

@ 10,65 get ep

@ 12,50 get CP

@ 12,65 get P

@ 14,50 get PP

@ 14,65 get PP

read

V = Veg * VP

e = egg * ep

ch = C * CP

pan = P * PP

@ 15,72 say v + e +

ch + pan

* Text... End text

In the foxpro, when multiline output need to be created then all the lines becomes written in the text and end text specification.

Text

? "Foxpro"

? "Access"

? "Oracle"

? "Mysql"

endtext

* Wait command:-

In foxpro, whenever a user need to pause the processing of the program statement then wait command is to be used. The wait command is ~~be used~~ becomes used with or without message.

g:- ^{Wait} Wait "press any key to continue"

② WAPTA roll wis by the user then check roll is b/w 1 to 120 if not then appropriate message being inputted. The message becomes removed along with the inputted value to get new input.

@ 5,10 say "Roll"

@ 5,20 get x0

if $x0 > 1$ and $x0 < 120$ then

@ 20,10 say "Roll is correct"

else

@ 20,10 say "Roll is incorrect"

Wait

@ 20,10 to 20,27 clear

@ 5,20 to 5,25 clear

@ 5,20 get x0

End if

Q. What is the difference b/w DBMS & RDBMS.

- | | |
|---|---|
| <p>DBMS</p> <ol style="list-style-type: none"> 1) It has only one table concept. 2) The duplicate value can be inputted. 3) It do not support master and transaction table concept. 4) The DBMS do not used at backend to store the data permanently. 5) The CUI based operation takes place. 6) It do not support any type of network based operation. 7) The data sharing do not be supported. 8) It do not have internal or external security. | <p>RDBMS</p> <ol style="list-style-type: none"> 1) Two or more than two tables becomes used. 2) Due to key concept the duplicate value do not be inputted. 3) It has the concept of master and transaction table. 4) The RDBMS is created for backend to store the data permanently. 5) The GUI based operation becomes takes place. 6) The RDBMS supports the network features. 7) The data becomes shared among the table in the same or different system. 8) The password is external & data hiding is the internal security of the RDBMS. |
|---|---|

* Text ---- Endtext command -

When a user need to show more than one lines of the text at the output window then this command is to be used. To show the text output the '?' sign do not required. The syntax of this command is -

→ Text

list of text lines
endtext

Eg:- Clear
text

list of items

1. Monitor
2. Printer
3. Scanner
4. keyboard

* Do case command -

When a user need to work on choice based operation then this particular command is used. The program having more than one choices that may either be numeric or character value. When any choice being matched then the expression written below it executes and if no any choice being match then the expression written below otherwise executes. The syntax is -

→ do case

case expression		otherwise
statement		statement
case expression		endcase
statement		

Eg:- Clear
set talk off
store 0 to n
@ 10,10 say "Enter the week day number";
get n;
picture "99"
read
do case
case n = 1
? "Sunday"
case n = 2
? "Monday"
case n = 3
? "Tuesday"
case n = 4
? "Wednesday"
case n = 5
? "Thursday"
case n = 6
? "Friday"
case n = 7
? "Saturday"
otherwise
? "Out of day"
endcase

* Scan ---- Endscan command -

When a user need to access the data from the database then it is used. The looping as well as conditional statement is used to perform the task.

→ Scan
program syntax
endscan

Ex:- Clear

set talk off

Use student

Input "Enter the roll:" to r

scan for roll = r

? "Name", name

endscan

* Procedure -

In foxpro programming environment whenever a user need to create the subprogram then the concept of procedure is used. To create the procedure the keyword "procedure" is written along with procedure name. At the end of procedure the 'return' keyword is used. Once a user need to execute the procedure then the 'Do' keyword is written along with the procedure name. In command window, when a user need to execute the specified procedure then the name of the procedure along with do keyword and the name of the program file with in clause is written.

→ Do procedure-name in program-file-name

Q. Create two procedure name 'add_num' and 'check_num' in which first add two numbers whereas second find which one is greater b/w two numbers?

procedure add_num

clear

store 0 to a, b, c

@ 10, 30 say "Enter the first number" get a pict "999"

@ 11, 30 say "Enter second number" get b pict "999"

read

c = a + b

@ 15, 30 say "Sum = " + str(c)

return

procedure check_num

clear

store 0 to a, b, c

@ 10, 30 say "Enter first no." get a pict "999"

@ 11, 30 say "Enter second no." get b pict "999"

read

if a > b

@ 15, 30 say "First no. is greater"

else

@ 15, 30 say "Second no. is greater"

endif

return

do case

case ch = 1

do add_num


```
case ch = 2  
do check_num  
otherwise  
@19,30 " Out of choice"  
wait  
endcase
```