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Q No \Rightarrow 01

(-: Answer :-)

⊛ Declaring variable \Rightarrow

A variable is a named location that stores a value. Value may be numbers, text, images, sounds, and other type of data. To store a value, you first have to declare a variable.

```
String message;
```

This statement is declaration, because it declares that the variable named message has the type String.

To declare an integer variable named x, you simply type:

```
int x;
```

x is an arbitrary name for the variable.

```
String firstName;
```

```
String lastName;
```

```
int hour, minute;
```

This example declares two variables with type string and two with type int.

* Printing variable :->

You can display the value of a variable using print or println

The following statement declare a variable named firstLine - assign it the value "Hello, again!" and display that value

```
String firstLine = "Hello  
again!";
```

```
System.out.println(firstLine);
```

When we talk about displaying a variable, we generally mean the value of the variable. To display the name of a variable, you have to put it in quotes.

```
System.out.println("The value  
of firstLine is")
```

```
System.out.println(firstLine);
```

For this example the output is

The value of firstLine is
Hello, again!

Q NO 2:

ANS:-

if in java is used to specify a block of code which we want to execute:

Mean by using on "if" statement there must be be condition which will decide that the specify block should be executed or not. if the condition is true the block of code is executed and if it is false then it will not be executed these statements are called Conditional statements.

Example:

```
if (length > 18)
{
    System.out.print ("allowed");
}
else
{
    System.out.print ("not allowed");
}
}
```

Class Demo

```
{
    public static
    void main [ ]

{
    Scanner scan =
    new Scanner ( ) ;
    int a; int result ;
    int b ;
    char c ;
    System.out.println(" please enter first digit ");

a = scan.next int ( ) ;
System.out.println (" please enter next int ");

b = scan.next int ( ) ;
System.out.println (" please enter + , - , x , ÷ ");

c = scan.next ( ) ;

if ( c = '+' ) {
    result = a + b ;
}
else if ( c = '-' ) ;
{
    result = a - b ;
}
else if ( c = " x " ) ;
```

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Q No = 03
↳ Answer : ⇒

if else if statement : ⇒

if - else - if statement is used when we need to check multiple conditions. In this statement we have only one "if" and one "else" however we can have multiple "else if" it is also known as if else if ladder.

Example :

```
int user = 21
if (user <= 18)
{
    System.out.println("user is 18 years younger");
}
else if (user > 18 && user < 40);
{
    System.out.println("user is b/w 19 and 39");
}
else
{
    System.out.println("user is older than 40");
}
}
```

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Loops are used to execute a set of statements repeated until a particular condition is satisfied in java we have three types of basic loops: for, while and do-while.

(1) For loop:

For loop provides a concise way of writing the loop structure. Unlike a while loop, a for statement consumes the initialization, condition and increment/decrement in one line thereby providing a shorter, easy to debug structure of looping.

example:

example:

```
class ForLoop Demo
```

```
{
```

```
    public static void main (String args[])
```

```
    {
```

```
        for (int x = 2; x <= 4; x++)
```

```
            System.out.println("value of x: " + x);
```

```
    }
```

```
}
```

(3) do while::

do while loop is similar to while loop with only difference that it checks for condition after executing the statements, and therefore is an example of Exit Control Loop.

Example::

```
class dowhileloop Demo
{
    public static void main(String args[])
    {
        int x = 21;
        do
        {
            System.out.println("value of x:" + x);
            x++;
        }
        while (x < 20);
    }
}
```


(2) While loop :-

A While loop is a Control flow Statement that allows Code to be executed repeatedly based on a given Boolean Condition. The while loop can be thought of as a repeating if statement.

example :-

```

While (boolean condition)
{
    loop statements....
}

```

example .

```

class while loop Demo
{
    public static void main (String args[])
    int x = 1;

    while (x <= 4)
    {
        System.out.println ("value of x:");

        x++;
    }
}

```

Q NO (5)

Class DEMO

{

Public static void main() {

int M;

Scanner scan = new Scanner();

int number;

System.out.println("please enter
the value from which you want
to start decrements table");

number = scan.nextInt();

for (i = number; i <= number; i--)

{

M = 3 * i;

System.out.println(M + " ");

}

}

}

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Q(5) output

Please enter a value which you want

$$= 10$$

$$10 \times 3 = 30$$

$$9 \times 3 = 27$$

$$8 \times 3 = 24$$

$$7 \times 3 = 21$$

$$6 \times 3 = 18$$

$$5 \times 3 = 15$$

$$4 \times 3 = 12$$

$$3 \times 3 = 9$$

$$2 \times 3 = 6$$

$$1 \times 3 = 3$$

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