Multiple if :- gt in used to check multiple

Condition every if condition will be checked

Syntax	What's the o/p

if (condition)
 	
 stm;
 	
 if (condition)
 	
 stm;
 	
 .
 .
 .
 	
 if (condition)
 	
 stm;
	int a = 10;
	
	 if (a >= 10)
	
	 sopl ("Hi");
	
	 if (a == 10)
	
	 sopl ("Bye");
	
	 else
	 sopl ("Go Away");

if ~~&&~~ Hi
Bye

8 WAP that read 4 Number from user
and display bigger No.

⋮

```
Scanner ob = new Scanner(System.in);
SOPL("enter 4 No");
int a = ob.nextInt();
int b = ob.nextInt();
int c = ob.nextInt();
int d = ob.nextInt();
int m = a;
if(b>m)
    m = b;

if(c>m)
    m = c;

if(d>m)
    M = d;

SOPL("Bigger No = "+m);
```

a	b	c	d
12	7	30	80

M = ~~12~~ ~~30~~ (80)

a	b	c	d
10	~~17~~	10	30

M = ~~10~~ 30

a	b	c	d
7	10	2	80

M = ~~7 10 2~~ 80

Nested if :- if inside the if, called Nested if

Syntax

```
if (condition)
{
    if (condition)
    stat;
    else
    stat;
}
else
{
    if (condition)
    stat;
    else
    stat;
}
```

WAP that read year from user and check given year is leap or Not

1600	1700	1992	1993
Leap year	Not a leaf year	Leap year	Not a leap year

```
Scanner  ob = new   Scanner (System.in);
   Sopl ("enter year");
   int   a = ob.nextInt();
  if ( a % 100 == 0 )
   {  if ( a % 400 == 0 )
        Sopl ("Leap year");
      else
        Sopl ("Not a Leap year");
   }

else
{  if ( a % 4 == 0 )
   Sopl ("Leap year");
  else
   Sopl ("Not a Leap year");

}
```

1700	1600	1992	1993
Not a Leap year	Leap year	Leap year	Not a Leap year

```
SOPL("enter year");
int a = ob.nextInt();

if((a%4==0 && a%100!=0) ||
        (a%400==0))

    SOPL("Leap year");

else
    SOPL("Not a leap year");
```

1700	1600	1992	1993
Not a leap Yee	Leap Ye	Leap yea	Not a Leap yea

Answers (of if-en tree)

```
:
:

Scanner ob = new Scanner(System.in);

SOPL("enter a character");

char ch = ob.nextline().charAt(0);
```

```
if ( (ch >= 'A' && ch <= 'Z') || (ch >= 'a' &&
                                   ch <= 'z') )
    SopL ("Alphabet");

else if ( ch >= '0' && ch <= '9')
    SopL ("Digit");

else
    SopL ("Symbol");
```

Answer : Electricity Unit

```
:
:

Scanner   ob = new Scanner (System.in);
SopL ("entr Lomome Unit");
ent   a = ob.nextInt();
double b = 0.0;

if ( a <= 50)
    b = a * .50;

else if ( a <= 150)
    b = (50 x .50) + (a - 50) x .75;
```

else if ($A <= 250$)

$b = (50 \times \cdot 50) + (100 \times \cdot 75) +$

$(a - 150) \times 1 \cdot 20;$

else

$b = (50 \times \cdot 50) + (100 \times \cdot 75) +$

$(100 \times 1 \cdot 20) + (A - 250) \times 1 \cdot 50;$

$b = b \times 1 \cdot 20;$

sopl (b);

Q WAP that read choice from user
and display area according choice

Choice	Area
1	circle
2	rectangle
3	Triangle
4	square
other	wrong choice

```java
Scanner ob = new Scanner (System.in);

SOPL ( " Prau 1 for Area of Circle \n Prau 2
              for Area of Rectangle \n Prau 3
      for Area of Trangle \n Prau 4 Area of
                        Square");

int choice = ob.nextInt();

if ( choice == 1 )
{
    SOPL ("enter radius");
    float r = ob.nextfloat ();
    float a = 3.14f * r * r;
    SOPL (a);
}
else if ( choice == 2)
{
    SOPL ("enter length & breadth");
    float l = ob.nextfloat ();
    float b = ob.nextfloat();
    float a = l*b;
```

```
        SOPL ( b ),
      }
    else if (choice == 3)
    {
        SOPL ("enter bare & height");

        float B = ob.hextfloat();
        float H = ob.hextfloat();

        floa   a = (B×H)/2;

        SOPL (a);
    }
  else if (choice == 4)
    { SOPL (" enter side");
      float s = ob.hextfloat();

      flow   a = 4 × s;

    } SOPL (a),

    else
      SOPL (" wrong choice")
                                 /
```