Python Assignment 1

Topic : If Statement

1. Write a program to input any year and check whether it leap year or not.

2. Write a program to input any number and print its absolute value.

3. Write a program to find out commission earned by a salesman. If his/her monthly sales is above 50000 then give 10% otherwise give 5% of monthly sales.

4. Write a program to input three angles of a triangle and find out whether it is a proper triangle or not.

5. Write a program to input two numbers and an operator (+,*,-,/,**) and display result accordingly.

6. Write a program to input age and display appropriate message according to following criteria:

Age (in years)	Category
0-2	Infant
3-12	Child
13-19	Teen
20-60	Adult
Above 60	Senior Citizen

7. Write a program to input two numbers and check whether first number is divisible by second or not.

8. Write a program to input a number, find out whether it ends with 7 or 4 and display appropriate message.

Find the output of the following code snippets:

a)
``python
x = 3
y = 7
if x > 5 or y < 10:
    print("Condition is true")
else:
    print("Condition is false")
``
	b)
	``python
	x = 10
	if x % 2 == 0:
	    print("x is even")
	else:
	    print("x is odd")
	``

c)
``python
num = -5
if num > 0:
    result = "Positive"
elif num < 0:
    result = "Negative"
print("The number is:", result)
``
	d)
	``python
	grade = 85
	if grade >= 90:
	    letter = "A"
	elif grade >= 80:
	    letter = "B"
	else:
	    letter = "C"
	print("Your letter grade is:", letter)
	``

d)
``python
age = 15
if age < 13:
    print("Child")
elif age < 20:
    print("Teenager")
else:
    print("Adult")
``
	e)
	``python
	number = 0
	if number:
	    print("The number is non-zero")
	else:
	    print("The number is zero")
	``

f)
``python
temperature = 25
if temperature > 30:
    print("It's hot outside")
elif temperature > 20:
    print("It's a pleasant day")
else:
    print("It's cold outside")
``
	g)
	``python
	a = 10
	b = 20
	if a < b:
	    print("a is less than b")
	elif a == b:
	    print("a is equal to b")
	else:
	    print("a is greater than b")
	``

h)
``python
x=2
y=1
if x>12:
    x=x*2
    y=x+10
print("x= ",x,", y= ",y)
``
	i)
	``python
	x=2
	y=4
	if x>=y:
	  if x>y:
	     x=x*3
	  else:
	     y=x+9
	print("x= ",x,", y= ",y)
	``

j)
``python
x=11
y=11
if x!=y:
  x=x+3
y=x+4
print("x= ",x,", y= ",y)
``
	k)
	``python
	x=12
	y=4
	if x>y:
	  x=x*3
	  y=x*4
	else:
	  x=x+3
	  y=x+4
	print("x= ",x,", y= ",y)
	``