ASSIGNMENT-II

1.What are the two values of the Boolean data type? How do you write them?
ans.) There are two values of boolean data type, they are 'True' and 'False'. a boolean data type declared with "bool" keyword and can only take the values true or false.
when the value is returned 1 than it is called true, otherwise it is called false.

```
eg:- a=0
b=bool(a)
print(b)
o/p :-  1=true
```

2. What are the three different types of Boolean operators?
ans.) there are three types of boolean operators.
i) AND
ii) OR
iii) NOT

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean
values for the operator and what it evaluate).
ans.) Here "1" is True and "0" is False.
i) AND

A	B	C		
0	0	0	--	False and False is False
0	1	0	--	False and True is False
1	0	0	--	True and False is False
1	1	1	--	True and True is True

ii) OR

A	B	C		
0	0	0	--	False and False is False
0	1	1	--	False and True is True
1	0	1	--	True and False is True
1	1	1	--	True and True is True

iii) NOT

A	B		
0	1	--	False is True
1	0	--	True is False

4. What are the values of the following expressions?
ans.)
i) (5 > 4) and (3 == 5)
ans) False

ii) not (5> 4)
ans) False
iii) (5 > 4) or (3 == 5)
ans) True
iv) not ((5 > 4) or (3 == 5))
ans) False
v) (True and True) and (True == False)
ans) False
vi) (not False) or (not True)
ans) True

5. What are the six comparison operators?
ans.) i) (<) less than , ii) (>) greater than , iii) (<=) less than or equal to ,iv) (>=) greater than or equal to , v) (!=) not equal to , vi) (=) equal to.

6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.
ans.) assignment operator is defined with the symbol as "=" , where as equal to operator is defined as "==". The assignment operator is used to assign the value , and equal to operator is used to compare the values between two operands.
both these operators are used in depending on the situation.
ex:-

```
x = 6
print (y)
```

o/p:- 6

ii)

```
int   x=6
int   y=6
 if x==y:
    print(“True”)
 else:
    print("false")
```

o/p:- true

7. Identify the three blocks in this code:
ans.)

```
# spam = 0
# if spam == 10:
    print('eggs')
if spam > 5:
    print('bacon')
  else:
    print('ham')
    print('spam')
```

* the three blocks are everything inside the if statement , and the printing lines are print('eggs') , print('bacon') , print('ham').

8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints
Greetings! if anything else is stored in spam.
ans.)

```
 spam=0
for i in range (1,10):
    spam=spam+1
    if spam==1:
        print("Hello")
    if spam==2:
        print("Howdy")
else:
    print("Greetings!")
```

(OR)

```
if spam == 1 :
print('Hello')
elif spam == 2 :
print('Howdy')
else:
print('Greetings!)
```

9.If your programme is stuck in an endless loop, what keys you will press?
ans.) CTRL + C or (break key , or external intervention)

10. How can you tell the difference between break and continue?
ans.) The break statement will stops the execution and comes outside of the loop . the continue statement will starts the execution by leaving the current iteration.

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?
ans.)
-----> range(10) , range(0,10), range(0,10,1)
the above showed ranges all are prints the same value as '0 to 9' , and up to '9 th' value only ,not '10 th' value , because the ranges may count up to the previous value of ending value .

i) range(10)
* this range will prints from '0 to 9' , here the programer will get an dought that how the system will prints the range, whether it will starts with 0 or 1 like that. but , it will starts with '0' only.

ii) range(0,10)
* Here '0' is an starting value and '10' is an ending value.

iii) range(0,10,1)
* Here '0' is an starting value and '10' is an ending value and '1' is an step up value , means we can printing the ranges of outputs by using step up.

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.
ans.)
i) FOR loop

```
for i in range(1,10):
  print(i)
```

ii) WHILE loop

```
    i=1
while i<10:
   print(i)
   i=i+1
```

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?
ans.) spam.bacon()