Assignment – 2 (Sahdev Saini)

1.What are the two values of the Boolean data type? How do you write them?

Ans :- The two values of Boolean data type are: True and false (0 and 1) . Write the as T for True and F for false

2. What are the three different types of Boolean operators?

Ans:- The three different types of Boolean operators are:

1. AND

2. OR

3. 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:- Truth table of AND:

S.no.	Value	Value	AND
1.	True	True	True
2.	True	False	False
3.	False	True	False
4.	False	False	False

Truth Table of OR:

S.no.	Value	Value	OR
1.	True	True	True
2.	True	False	True
3.	False	True	True
4.	False	False	False

Truth Table of NOT

S.no.	Value	NOT
1.	True	False
2.	False	True

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

(True and True) and (True == False)

(not False) or (not True)

Ans:-

(5 > 4) and (3 == 5)   **False**

not (5 > 4)   **False**

(5 > 4) or (3 == 5)   **True**

not ((5 > 4) or (3 == 5))   **False**

(True and True) and (True == False)   **False**

(not False) or (not True)   **True**

5. What are the six comparison operators?

Ans:-

1. Equal to (==)

2. Less than (<)

3. Less than or equal to(<=)

4. Greater than (>)

5. Greater than or equal to (>=)

6. Not 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 :-

Equal to operator:-

It is denoted by (==) operator, it is used to compare two values

  For ex:- 20 == 02 (false)

Assignment operator:-

It is denoted by (=) operator, it is used to assign a value to another variable.

  For ex:- a= 20

  Now a having value 20 we can use it in entire program.

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

```
if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')
```

Ans:-

```
spam = 0
```

if spam == 10:	**First Block**
print('eggs')	
if spam > 5:	**Second Block**
print('bacon')	
else:	**Third Block**
print('ham')	
print('spam')	
print('spam')	

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:-

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'll press?

Ans :- Ctrl + C

10. How can you tell the difference between break and continue?

Ans:-

Break	Continue
In break statement the control exist from the loop .	**In Continue statement the control remains in the loop.**
It is used to stop the execution at particular condition .	**It is used to skip a particular iteration of execution .**

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

Ans:-

Range(10): In this condition loop execute from 0 to 10 .

Range(0,10): In this condition loop execute from 0 to 9 , it behaves like open bracket for value 10 not included 10 in the execution.

Range(0,10,1):- Execution is same as Range(0,10) but value executed with a gap of 1.

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:-

Using for loop

for i in range(10):

   print(i)

Using while loop

i=0

while(i<=10):

   print(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:-

 Import spam as sm

Sm.bacon()