**Assignment No.:- 2**

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

**Ans: - True and False are the two values of the Boolean data type. And it will be write by using T and F, with rest of the word lowercase.**

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

**Ans: - and, or, and not are the three types of Boolean operators.**

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 evaluates).

**Ans:-**

**True and True is True**

**True and False is False**

**False and True is False**

**False and False is False**

**True or True is True**

**True or False is True**

**False or True is True**

**False or False is False**

**not true is False**

**not False is True**

4. What are the values of the following expressions?

(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: - <, >, <=, >=, == and != are the six comparison operators.**

6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

**Ans: - == is the equal to operator that compares two values and evaluates to a Boolean, While = is the assignment operator that stores the value in a variable. A condition is an expression used in a flow control statement that evaluates to a Boolean value.**

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: - Three blocks are everything inside the if statement and the line print(‘bacon’)**

**And print(‘ham’).**

**Print(‘eggs’)**

**If spam > 5:**

**Print(‘bacon’)**

**else:**

**Print(‘ham’)**

**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’)**

**if spam == 2:**

**print(‘Howdy’)**

**else:**

**print(‘Greetings!’)**

9.If your programme is stuck in an endless loop, what keys you’ll press?

**Ans: - Press ctrl + c to stop a program stuck in an endless loop.**

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

**Ans:-The break statement will move the execution outside and just after a loop. The continue statement will move the execution to the start of the loop.**

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

**Ans: -The range (10) call ranges from 0 to 10 without including, range (0,10) specifically tells the loop to start at 0, and range (0,10,1) specifically tells the loop to increase the variable by 1 on each iteration.**

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:-**

**for i int range (1,11):**

**Print(i)**

**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: -This function can be called with spam.bacon().**