1.What are the two values of the Boolean data type? How do you write them? **Ans: Value of Boolean data type : True, False. This is already written as first character in upper case and the remains chars in lower case**

2. What are the three different types of Boolean operators? Ans : NOT , AND & OR

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: 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) **Ans: False**

not (5 > 4) **Ans: False**

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

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

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

(not False) or (not True) **Ans : True**

5. What are the six comparison operators? **Ans: >, <, ==, !=,>= & <=**

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 : x= 10, assigning value 10 to variable x**

**Whereas equal operator == is used to verify the equality between 2 different vales/variables like A==B and gives a Boolean vale**

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: Inside the if statement**

spam = 0

**if spam == 10:**

**print('eggs')**

**if spam > 5:**

**print('bacon')**

**else:**

**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 tells the code to stop execution at that point and goes to the step after that function whereas continue will start from the beginning of the function**

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

**Ans: range(10) – takes the value from 0 to 9**

**Range(0,10) - – takes the value from 0 to 9**

**range(0, 10, 1) – takes the vale from 0 to 9 in the increment of 1**

**All are same in this situation**

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 in range(1,11):**

**print(i)**

**and**

**i=1**

**while i < 11:**

**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()**