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

**Ans: The two values of the Boolean data type is TRUE and FALSE. It used to represent the truth value of the expressions.**

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

**Ans: AND, OR, 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: AND operator**

**TRUE AND TRUE = TRUE**

**TRUE AND FALSE = FALSE**

**FALSE AND TRUE = FALSE**

**FALSE AND FALSE = FALSE**

**OR operator**

**TRUE OR TRUE = TRUE**

**TRUE OR FALSE = TRUE**

**FALSE OR TRUE = TRUE**

**FALSE OR FALSE = FALSE**

**NOT operator**

**TRUE NOT TRUE = FALSE**

**TRUE NOT FALSE = FALSE**

**FALSE NOT TRUE = TRUE**

**FALSE NOT FALSE = 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: Equal to, not equal to, greater than, greater than or equal to, less than, less than or 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: The “=” is an assignment operator is used to assign the value on the right to the variable on the left. The '==' operator checks whether the two given operands are equal or not. If so, it returns true. Otherwise it returns false.**

7. Identify the three blocks in this code: **(Ans: The bolded statements are the blocks in this code)**

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: spam = 0**

**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: ctrl + C**

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

**Ans: The break statement is usually used with the switch statement, and it can also use it within the while loop, do-while loop, or the for-loop. The continue statement is not used with the switch statement, but it can be used within the while loop, do-while loop, or for-loop.**

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

**Ans: in range(10) , stop value is been mentioned so the data reading goes from the 0 to 10th position data. (for example for i in range(10): print(i, end=" ") print() OUTPUT = 0 1 2 3 4 5 6 7 8 9 ); in range(0,10), the start and stop values are been mentioned as the data starts reading goes form the starting position to the ending position. (for example for in in range(0, 10) the output gives like 0 1 2 3 4 5 6 7 8 9); in range(0,10,1), the start, stop and step values are been mentioned so the data reading goes from start to end point by following the number of steps mentioned.**

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: p1:**

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

**print(i)**

**p2:**

**i = 1**

**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: spam.bacon()**