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

**Ans :** True & False, 0 & 1.

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:

0 & 0 = 0

0 & 1 = 0

1 & 0 = 0

1 & 1 = 1

OR:

0 or 0 = 0

0 or 1 = 1

1 or 0 = 1

1 or 1 = 1

NOT:

0!=1

1!=0

4. What are the values of the following expressions?

**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 :** <,>,<=,>=,==,!=.

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 :** spam = 0

Block 1 -----if spam == 10:

print('eggs')

Block 2 -----if spam > 5:

print('bacon')

Block 3------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 :** The **break** statement is usually used with the switch statement, and it can also use it within the loops.The **continue** statement is not used with the switch statement, but it can be used within the loops.

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

**Ans :** In range(10),we didn't mentioned the start value and step.In range(0,10),we gave the start value but not the step,In range(0,10,1) we gave start and end values and also step value.in python the default start value is 0 and the default step size is 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 :**

**For:**

for i in range(1, 11):

print(i)

**While:**

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()