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

**Ans:** The values of Boolean data type is True and False. It is written as True, False.

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 evaluates).

**Ans:** **AND**

A B Result

False False False

True False False

False True False

True True True

**OR**

A B Result

False False False

True False True

False True True

True True True

**NOT**

A Result

False True

True False

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:** greater than (>), Lesser than (<), Greater than equal to(>=),Lesser than equal to(<=),Not equal to(!=),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 difference between the operators are number of equal to signs in them.

**Assignment:** (=) , var1=10(Assign the value 10 to var1)

**Equal to:** (==) , var1==10(Checks if the value of var1 is 10)

7. Identify the three blocks in this code:

spam = 0

**Block 1:**

if spam == 10:

print('eggs')

**Block 2:**

if spam > 5:

print('bacon')

else:

print('ham')

**Block 3:**

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.

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?

Answer**: Ctrl+Alt+Delete** (or)

**Kernel Interrupt** in Jupyter Notebook

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

Ans: **BreaK** - break statement is used to stop the execution of loop and break out of the loop. The statements inside the loop after break will not be executed.

CONTINUE- Continue keyword is used to skip the current iteration of the loop. The statement inside the loop after the continue statement will not get executed only once.

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

Ans: These are the different ways in which the range object can be written in Python. The functionality/operation of all the statements will be same. It’s Working as follows start from value 0, Iterate till the value 10, and go by 1 step (increment by 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.

**FOR LOOP:** for item in range (0,11,1):

Print(item)

**WHILE LOOP:** item=1

While(item<=10):

print(item)

item=item+1

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

Answer: from spam import bacon (**OR)** from spam import \*