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

**Ans**: True and 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 evaluate ).

**Ans**:

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**: equal to use to compare 2 values, i.e in python is 2 refrence variables are pointing to same memory or not example a==b for a=2,b=2 is True and False if a=2 and b=3 OR a=3 and b=2.

And assignement operator used to assign value to any variable, i.e a=6 by this a will become 6 and b will remain 3

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: if-if-else**

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(“Greeting”)

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

**Ans**: ctrl+c (**works for me**)

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

**Ans**: **break**: if certain condition is true/false the exit the loop

**Continue:** if certain condition is true/false just skip this particular iteration

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

**Ans**: Actually if considering output all will generate same output.

All will create a range object which represent sequence of numbers

But in range(10) starting values is by-default 0, and ending = end-1.

In range(0,10) here we are explicitly defining our starting value. If we don’t give it will generate value from 0to9 like range(10)

In range(0,10,1) here we are also mentioning ‘step’ also means while generating value from 0to10(exclusively) what is difference between 2 value.

This difference is default 1, and we can see proof of this in range(10) and range(0,10)

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**:

**Using for loop**:

for I in range(0,11,1):

print(I,end=” ”)

**Using while loop:**

i=0

while(i<11):

print(i,end=" ")

i+=1

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

Ans: First we need to import it and then use it.

Example:

Import pandas as pd. (importing)

df = pd.read\_csv(r”path\_to\_file”)