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

Ans : Two Boolean data types are : TRUE and FALSE.

In python, we can write them as :

type(True), type(False)

Result : (bool, bool)

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

Ans : there are 3 types of Boolean operators :

AND , OR and 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: Truth table for AND operator :

TT🡪T

TF🡪F

FT🡪F

FF🡪F

Truth table for OR operator :

TT🡪T

TF🡪T

FT🡪T

FF🡪F

Truth table for OR operator :

~T🡪F

~F🡪T

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 : < , > , ==,=!,>=,<= are six comparison operators.

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 , assigns the value to a variable. It is single equal sign ‘=’.

e.g. a=10

Whereas equal to uses double equal sign ‘==’, and compares if the value assigned to a variable is equal to the comparing value. E.g. a==20 (which is false in this case).

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 : 1st block : spam = 0

if spam == 10:

print('eggs')

2nd Block : if spam > 5:

print('bacon')

3rd Block : 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 =int(input(‘Print your number : ‘))

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 :We will stop the Kernel.

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

Ans. If in a loop , condition meets, BREAK will end the loop their and exit, displaying the output but CONTINUE will keep on searching for next value in the loop even after the condition is satisfied.

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

Ans : There is no difference between range(10), range(0,10) and range(0,10,1).

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 : Using FOR Loop :

for i in range(11):

print(i)

else:

print('End of loop')

Using WHILE loop :

i = 1

while(i<=10):

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.bcon()