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

True and False are the two values of Boolean data type.

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

AND, OR, NOT are the three Boolean operators.

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).

**AND**

Result

0 0 0

0 1 0

1 0 0

1 1 1

**OR**

Result

0 0 0

0 1 1

1 0 1

1 1 1

**NOT**

Result

1. 1
2. 0

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?

* Less than ( < )
* Less than or equal to (<=)
* Greater than (>)
* Greater than or equal to (>=)
* Equal to ( == )
* Not 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.

Equal to 🡪 =

Assignment 🡪 ==

Equal to Is used to assign some value whereas assignment is used for comparison.

7. Identify the three blocks in this code:

spam = 0

if spam == 10: # First block

print('eggs')

if spam > 5: # Second Block

print('bacon')

else: # Third block

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.

Spam= int(input())

If Spam==1:

Print(“Hello”)

Elif Spam ==2:

Prints(“Howdy”)

Else:

Print(“Greetings!”)

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

Endless loop can be broken by pressing ctrl + C.

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

Break is used to bring control out of the loop

Continue is used to bring control to beginning of the loop.

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

Range(10) – value from 0 (default value is taken) to 10

Range(0,10)-value from 0(or any other specified value) to 10

Range(0,10,1)- value from 0(specified value) to 10 with difference of 1 inbetween.

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.

Num=0

For i in range(1,10):

Num=num+1

Print(num)

While(i<=10):

Num=num+1

Print(num)

I=i+1

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

Import spam

spam.bacon()