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

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

2. What are the three different 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 ).

**x and y** – True if both are True.

**x or y –** True if at least one is True.

**not x** –True only if 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?

Equal to, Not equal to, Less than, Greater than, Less than or equal to and Greater than or 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** used when comparing two variables and **Assignment Operator** used to check whether variable values are equal.

e.g- If i want to store value in a variable i will use **Equal to** **Operator**

**a = 2**

and when i want to compare variable that time i will use **Assignment Operator**

**a == b**

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: Block 3

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.

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?

**Ctrl+C**

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

**Break** is used to terminate the loop and **Continue** is used to exit from the current iteration and execute the next iteration.

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

**range(10)** – Gives a sequence of numbers from 0 to 9,

**range(0, 10)** - Gives a sequence of numbers from 0 to 9, here we are specifing the start and end parameters

**range(0, 10, 1)** - Gives a sequence of numbers from 0 to 9 and the value gets incremented by 1, here we are entering the start, end and step parameter.

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 i in range(1,11):

print(“i”)

**While Loop**

num = 0

while num<10:

print(num +1)

num += 1

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

from spam import bacon