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

**True (1), False(0)**

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

**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).

**True AND True = True**

**True AND False = False**

**False AND False = False**

**True OR True = True**

**True OR False = True**

**False OR False = False**

**NOT True = False**

**NOT False = True**

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?

**>, >=, <, <=, ==,!=**

6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

**= is an assignment operator, for ex. z=1, here we are assigning 1 to z variable**

**Operators like >, <, == are used to compare a variable/value with respect to other variable/value**

7. Identify the three blocks in this code:

**3 Blocks**

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

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.

**spam = int(input())**

**if spam==1:**

**print('Hello')**

**elif spam==2:**

**print('Howdy')**

**else:**

**print('Greeting!')**

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 exit the loop and continue begins the next iteration 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) – Using loop this will print numbers from 0 to 9, range(i) generates sequence which starts from 0 stops at i-1**

**range(0,10) – Using loop this will print numbers from 0 to 9, range(i,j) generates sequence which starts from I and stops at j-1**

**range(0,10,1) - Using loop this will print numbers from 0 to 9, range(i,j,k) generates sequence which starts from I and stops at j-1 with k steps**

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 i in range(1,11):**

**print(i)**

**i = 1**

**while i < 11:**

**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?

**spam.bacon()**