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 –

**AND**

True True = True, True False = False, False True = False, False False = False

**OR**

True True = True, True False = True , False True = True, False False = False

**XOR**

True True = False ,True False = True ,False True = True ,False False = 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?

Ans - == (equal to)

!= (not equal to)

> (greater than)

< (less than)

>= (greater than or equal to)

<= (less 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.

**Ans -**   
The equal to operator is used to compare two values to see if they are equal. The assignment operator is used to assign a value to a variable.

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 - ham**

**spam**

**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?

I will end the kernel

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

Ans - When a break statement is executed in a loop, the loop is immediately exited and the program continues with the next statement after the loop. When a continue statement is executed in a loop, the program continues with 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)?

Ans - Range(10) will iterate from 0 to 9. Range(0, 10) will iterate from 0 to 9. Range(0, 10, 1) will iterate from 0 to 9

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 list(range(1,11)):

print(i)

**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?

spam.bacon()