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

**Ans:** python has built-in Boolean data types i.e., True (1) and False (0).

We can write them by command “bool ()”

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

**Ans:** and, or and not are the three Boolean operators.

1. 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).

**3.Ans: And Truth Table: OR Truth table: NOT Truth table:**

A B Output A B Output A output

0 0 0 0 0 0 0 1

1 0 0 1 0 1 1 0

0 1 0 0 1 1

1 1 1 1 1 1

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

(True and True) and (True == False)

(not False) or (not True)

**4 Ans:**

False

False

True

False

False

True

1. What are the six comparison operators?

5 ans:

* > (greater than) < (less than)
* >= (greater than or equal to ) <= (less than or equal to)
* == (equal to) != (not equal)

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

Ans:  = is an Assignment Operator it is used to assign the value of variable or expression, while ==is an Equal to Operator and it is a relation operator used for comparison

Example:

Assignment operator:

a = 10

b = 20

Equal operator:

5==5

This will return true

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:** from the above code identified that in 4 th line we have to place elif condition ,python does not support the two if’s in if statements.also while executing the code identation is must be followed.

1. 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 = 1

if spam == 1:

print("hello")

elif spam == 2:

print("howdy")

else:

print("Greetings!")

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

**Ans :** The keyboard interrupt method is useful when we want to manually stop . We can do this by pressing **Ctrl + C** on our keyboard, which sends a signal to the program to stop executing.

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

Ans :Break statement stops the entire process of the loop. Continue statement only stops the current iteration of the loop. Break also terminates the remaining iterations. Continue doesn't terminate the next iterations; it resumes with the successive iterations

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

Ans:

range(10): This will create a sequence of numbers from 0 to 9 . It starts from 0 by default and increments by 0 1 2 3 4 5 6 7 8 9

range(0,10): This will create a sequence of numbers from 0 to 9. it starts from 0 where we given start point and ends at 9 like 0 1 2 3 4 5 6 7 8 9.

range(0,10,1): this will create a sequence of numbers from 0 to 9.When the user call range() with three arguments, the user can choose not only where the series of numbers will start and stop, but also how big the difference will be between one number and the next.

1. 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:**

**For loop program: while loop program:**

For i in range(1,11) i = 1 print(i) while(i<=10):

  print(i)

  i+=1

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

**Ans:** This function can be called using spam.bacon()