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

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

We write using capital T and F, with the rest of the word in lowercase

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

**Ans –** AND, OR, NOT are the three different types of 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 ).

**Ans – Truth Table**

True and True is True.

True and False is False.

False and True is False.

False and False is False.

True or True is True.

True or False is True.

False or True is True.

False or False is False.

not True is False.

not False is 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?

**Ans –** Equal operator (==), Not Equal operator (!=), Greater than(>), Less than(<), Greater than equal to(>=), Less than 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 “=” is an assignment operator used to assign the value on the right to the variable on the left.**.**

**For Example -** a = 10;b = 20;

The ‘==’ [operator](https://www.geeksforgeeks.org/operators-in-c/) checks whether the two given operands are equal or not. If so, it returns true. Otherwise it returns false.

**For Example** - 5==5 #This will return true.

A condition is an expression used in a flow control statement that evaluates to a Boolean value.

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 –** The three blocks are everything inside the if statement and the lines print('bacon') and print('ham').

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

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.

**Ans-** The code is

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?

Press **Ctrl + c**

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

**Ans-** Break is used for immediate termination of loop while continue is used for skipping current iteration and resuming 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 -** The answer we get will be same the only difference is its way of writing.

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.

**Ans-** By using **For Loop**

number =[ 0,1,2,3,4,5,6,7,8,9,10]

for i in number:

print(i)

By using **while loop**

count = 1

while count <=10:

print(count)

count+=1

13. 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 with **spam.bacon().**