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

ANS: True, False

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

ANS: The AND Operator, the OR Operator, the NOT Operator.

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: A=True B=False

|  |  |  |
| --- | --- | --- |
| **Operator** | **Name** | **Example** |
| and | AND | A and B is False |
| Or | Or | A or B is True |
| && | And | A && B is False |
| || | Or | A ||B isTrue |
| xor | Excusive Or | A xor B isTrue |
| ! | Not | A ! B isTrue |

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)

ANS: True

5. What are the six comparison operators?

ANS: Equal to, less than, greater than, less than or equal to, greater than or equal to, not 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 is used to assign the value on the right to the variable on the left**

a = 10

a

this will return 10

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.

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: Indentation.

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: spam = 6

if spam == 1:

print('Hello')

if spam ==2:

print('Howdy')

else:

print('Greetings')

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

ANS: Press**CTRL-C**to stop a program stuck in an infinite loop.

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

ANS: The ‘break ‘stop the continuation of the loop.

The ‘continue’ does not stop the continuation of loop and it stops the current.

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

ANS: Here is**no difference** between range (10), range (0,10) and range (0,10,1). range function in Python takes 3 arguments and they are initial value, final value and increment value.

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: for i in range (1,11):

Print(i)

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

ANS: If we have **bacon** () funtion in **spam module** then first we need to import the **module** and then we need to import the funtion too. from **spam** import **bacon** This above code is used to import funtions from given **module**.