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

Ans:- The two values of the Boolean data types are True and False.

We can write them with yes-no, true- false, on-off etc.

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

Ans:- The three different types of Boolean operators are AND, OR and 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:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Input** | | **Output** | | | |
| **A** | **B** | **AND** | **OR** | **XOR** | **NOT** |
| 0 | 0 | 0 | 0 | 0 | 1 |
| 0 | 1 | 0 | 1 | 1 | 1 |
| 1 | 0 | 0 | 1 | 1 | 0 |
| 1 | 1 | 1 | 1 | 0 | 0 |

4. What are the values of the following expressions?

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

not (5 > 4) = False

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

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

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

(not False) or (not True)= True

5. What are the six comparison operators?

Ans:- Greater than >, Less than <, greater than equal to >=, less than equal to <=, 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:-Assignment operator uses only equal sign(=) and equal to uses double equal sign(==).

When we can use equal sign (=) to assign or put some value in to a variable and when we compare a variable with another variable we use double equal sign(==).

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs') = 1st block

if spam > 5:

print('bacon') = 2nd block

else:

print('ham')

print('spam')

print('spam') = 3rd block

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 = int(input("Enter number"))

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?

Ans :- I will press Crtl + C

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

Ans:- When we use break, it stops the execution of current loops and passes the control to the next loop. But when we use continue, it skips the current iteration and executes the very next iteration in 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 print 0 to 9, range(0,10) will print 0 to 9 and here we specify the starting point from 0 and , range(0,10) will print 0 to 9 and here we specify the starting point from 0 with step of 1. All are same in results but differs from specification.

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)

->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?

Ans:- We can call it with spam.bacon()