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

Ans : Boolean data type is either True of False . we write 1 for True and 0 For False .

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

Ans : 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 :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a | b | a && b | a || b | !a |
| True | True | True | True | False |
| True | False | False | True | False |
| False | True | False | True | True |
| false | false | false | false | true |

4. What are the values of the following expressions?

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

Ans : False

not (5 > 4)

Ans : False

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

Ans : True

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

Ans : False

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

Ans : False

(not False) or (not True)

Ans : True

5. What are the six comparison operators?

Ans : less than (<) , greater than (>) , less than or equal to (<=) , greater than or 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 : The “=” is used for assignment operator and the “==” is used for equal operator.

When we have to assign a value of a variable then we use assignment operator and when we have to check weather the two given operands are equal or not we use equal operator and it returns True or False .

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 = 0

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 : ctrl + C

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

Ans : The break statement stops the loop in which the statement is placed . Continue statement skips a single iteration in a loop .

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

Ans : Range(10)

When we call range() with one argument, we will get a series of numbers that starts at 0 and includes every whole number up to, but not including, the number that we have provided as the stop. Range(10) will print 0 ,1,2,3,4,5,6,7,8,9

Range(0,10)

When we call **range()** with two arguments, we get to decide not only where the series of numbers stops but also where it starts, so we don’t have to start at 0 all the time.

Range(0,10) will print 0,1,2,3,4,5,6,7,8,9

Range(0,10,1) = range(start,stop,step)

When the we call range() with three arguments, the we 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.

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<10):

print(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 : spam.bacon()