Assignment -2

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

Ans- The two types of Boolean data types are TRUE or FALSE. This is represented as 1 and 0 for TRUE and FALSE respectively.

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

Ans- Three different types of Boolean operators are AND,OR,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-

The truth table for AND (A+B) ,The Truth table for AND(A.B) , The truth table for NOT a=A’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | A+B | A.B | A’ |
| 0 | 0 | 0 | 0 | 1 |
| 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 | 0 |

4. What are the values of the following expressions?

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

Ans- 0 (FALSE)

not (5 > 4)

Ans- 0 (False)

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

Ans- 1 (True)

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

Ans- 0 (False)

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

Ans- False

(not False) or (not True)

Ans- True

5. What are the six comparison operators?

Ans- Six comparison operator are- <, >, ==, !, <=, >=

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

Ans- equal to(==) is used for comparing the values of L.H.S and R.H.S whereas assignment operator(=) is used for assigning the values of R.H.S to L.H.S. for example x==y means x is compared to y as if x is equal to y than it will give result true whereas x=y means value of y is assigned to x.

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- ham, spam, 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.

spam;

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- we will press Ctr+C in the terminal or console.

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

Ans- break- break statement terminates from the loop i.e after that no line is executed while continue statement will redirect to the condition i.e statement after continue will get skipped.

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

Ans- range(10) means number will stop at 10 i.e 0 to 9 since no starting point is specified it will stat at 0 whereas as range(0,10) means start at 0 and end at 10 son it will consider number from 0 to 9 as 0,1,2,3…9. While range(0,10,1) means start with 0 end with 10 and increment the number as 1 i.e 0,1,2,3,4,5…9.

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): program for print number from 1 to 10 using loop

print(i)

i=1;

while i<11: program for print number from 1 to 10 using while loop

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- importing spam

spam.beacon().