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

Ans: Two values of Boolean data types are ‘True’ and ‘False’.

Bool() function is used to evaluate the statement and in return gives True / False.

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

Ans: And, or and not are the three 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:

|  |  |  |
| --- | --- | --- |
| X | Y | X or Y |
| False | False | False |
| False | True | True |
| True | False | True |
| True | True | True |

|  |  |  |
| --- | --- | --- |
| X | Y | X and Y |
| False | False | False |
| False | True | False |
| True | False | False |
| True | True | True |

|  |  |
| --- | --- |
| X | X’ |
| False | True |
| True | False |

4. What are the values of the following expressions?

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

not (5 > 4) : True

(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: < (less than) , >(greater than), <= (less than or equal to), >= (greater than or equal to) , == (equals 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: When we consider LHS == RHS (this is called equal to operator) which checks for value on both sides

While assigning value to a variable (A=10) this is called assignment operator, since we are assigning a value of 10 to variable A.

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: All highlighted ones are 3 blocks in above code.

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')

elif 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: Break: It eliminates the execution of the remaining iteration of the loop.

Continue: It only terminates the current 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: range(10) : It will starts indexing from 0 to 9

Range(0,10) : Same as above (It will indexing from 0 to 9)

Range(0,10,1) : Same as above (It will indexing from 0 to 9). It is basically denoting range(start,stop,strp)

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)

count = 0

while (count < 11):

print (count)

count = count + 1

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

From spam Import bacon

#calling function

Bacon()