1. What are the Boolean data type's two values? How do you go about writing them?

The two values of Boolean data types are True , False.

For checking true

a = True

print (bool (a))

for checking false

a = True

print (bool(b))

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

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 ).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| A | B | A or B | A and B | not A | Not B |  |
| T | T | T | T | F | F |  |
| T | F | T | F | F | T |  |
| F | T | T | F | T | F |  |
| F | F | F | F | T | T |  |

4. What are the values of the following expressions?

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

not (5 > 4): False

(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 different types of reference operators?

Assignment Operators

Arithmetic Operators

Logical Operators

Comparison Operators

Bitwise Operators

Identity/Membership Operators

6. How do you tell the difference between the equal to and assignment operators?

Equal Operators is used whether two operands are equal or not and returns true if two operands are equal otherwise False. Assignment operator is used to assign the result of the expression value to variable.

7. Describe a condition and when you would use one.

If the condition in while loop is true , then we use one.

8. Recognize the following three blocks in this code:

spam = 0

if spam == 10:

print('eggs') ---1

if spam > 5:

print('bacon')---2

else:

print('ham')-----3

print('spam')

print('spam')

9. Create a programme that prints. If 1 is stored in spam, prints Hello; if 2 is stored in spam, prints Howdy; and if 3 is stored in spam, prints Salutations! if there's something else in spam.

if (spam==1):

print("Hello")

if (spam==2):

print("Howdy")

if (spam==3):

print("Salutations")

else:

print("spam")

10.If your programme is stuck in an endless loop, what keys can you press?

CTL+ C

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

In break statement when break keyword is encountered, it will exit the loop. But in case of continue keyword, the current iteration that is running will be stopped, and it will proceed with the next iteration.

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

range(10):It generates the sequence of number from 0 to 9 where 0 is the default value.

range(0,10): It generates the sequence of number from 0 to 9 where 0 is the starting point and 10 is the stop point which mentions the point to stop.

range(0,10,1): It generates the sequence of number from 0 to 9 where 0 is the starting point and 10 is the stop point which mentions the point to stop and 1 is the step size which mentions the number at which the point needs to increase before encounter the stopping point.

13. Using a for loop, write a short programme that prints the numbers 1 to 10 Then, using a while loop, create an identical programme that prints the numbers 1 to 10.

for a in range(1,11):

print(a)

i = 1

while i<11:

print(i)

i+=1

14. If you had a bacon() function within a spam module, what would you call it after importing spam?

Import spam

spam.bacon()