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

Ans 1: Two values of Boolean data types’ are True and False

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

Ans 2: 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 3:

True and True

True

True and False

False

False and True

False

False and False

False

Here with this ‘and ‘operator returns ‘True’ only if both the operands are True.

True or True

True

True or False

True

False or True

True

False or False

False

‘or’ operator returns True, when atleast one of the operands is True.

not True

False

not False

True

‘not’ returns the negation of the value which give. It returs True only if the operand is False.

4. What are the values of the following expressions?

Ans 4:

(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?

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

Ans 6: ‘==’ is equal to operator, which checks equality of its operands.

Ex: a == 10. Here , it checks whether the value in variable ‘a’ is equal to 10 or not. If value in a is equal to 10 , then it will return True. Else it will return False.

Assignment operators used to assign values to variable.

A = 10

Here variable A is assigned with the value 10. Now A refers to 10.

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

Ans 7: A condition is a Boolean expression ( expression which return either True or False as the value) based on its truth value the flow of execution of code decided. We use condition in situations where we have multiple options , based on which the further flow of execution of code should be.

8. Recognize the following three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

---1st block---It will check value in spam is 10 or not. If it is 10 it will print eggs.

if spam > 5:

print('bacon')

---2nd block--- This block will check the value of spam is greater than 5 or not. If it is True then bacon will print

else:

print('ham')

---3rd block--- If both the above condition are false it will print ham.

print('spam')

print('spam')

Irrespective of the above code the above two lines will be executed.

The output of the above code will be as below:

ham

spam

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.

Ans 9:

spam = int(input("Enter spam"))

if (spam == 1) :

print("Hello")

elif (spam == 2):

print("Howdy")

elif spam == 3:

print("Salutations")

else:

print("Something")

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

Ans 10: Ctrl + C

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

Ans 11:

These are the statements which can control the flow of a loop. “break” statement is used to break or just stop the execution of current loop and brings the flow comes out of the loop. “continue” statement is used to continue the execution of the loop without taking the execution flow to the next line ( line after the continue statement) and the execution flow will iterate the loop control variable to the next value.

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

Ans 12: All will give the same result. No difference among its functioning. But while writing the code in range(10) we are mentioning just stop value only. In range(0,10) we explicitly mentioning start value(0) and stop value(10). In range(0,10,1) we explicitely mentioning the step value(1) also.

Here in the code only difference is there all 3 varities will execute the same way only.

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.

Ans 13: Using for loop

i = 1

for i in range(1,11):

print(i)

Using whlile loop

i = 1

while i <= 10 :

print(i)

i = i + 1

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

alias