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

There are two values of Boolean data Type

1. True
2. False

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

the three different types of Boolean operators are

1. AND
2. OR
3. 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 ).

List1 = [1 and 1, 1 and 0, 0 and 1, 0 and 0] for AND operation

List2 = [1 or 1, 1 or 0, 0 or 1, 0 or 0] for OR operation

List3 = [not 1, not 0] for NOT operation

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 comparison operators?

== 🡪 is equal to

!= 🡪 is not equal to

> 🡪 is greater than

>= 🡪 is greater than or equal to

< 🡪 is less than

<= 🡪 is less than or 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.

' = ' 🡪 single equals to sign is used for the assignment operation.

' == ' 🡪 double equals to sign is used for checking condition.

7. Identify the three blocks in this code:

spam = 0

Block : 1

if spam == 10:

print('eggs')

Block : 2

if spam > 5:

print('bacon')

Block : 3

else:

print('ham')

print('spam')

print('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 = 1

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?

1. Ctrl + C on the command line.

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

Break: It is used to break the loop and exit from the loop

continue: It is used to skip the current iteration of the loop and continue with the next iteration.

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

All the range(10), range(0, 10), and range(0, 10, 1) are giving the same output. Hence there is no difference.

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.

for i in range(1, 11):

print(i, end = ' ')

1 2 3 4 5 6 7 8 9 10

i = 1

while i < 11:

print(i, end = ' ')

i += 1

1 2 3 4 5 6 7 8 9 10

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

import spam  
spam.bacon()