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

There are two Boolean. values: **True and False**

>>> type(False)

<class 'bool'>

>>> type(True)

<class 'bool'>

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

**AND, OR, and 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 ).

== equal to

!= not equal to

< less than

<= less than or equal to

> greater than

>= greater than or equal to

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

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

(not False) or (not True)

5. What are the six comparison operators?

**less than, greater than, less than or equal to, greater than or equal to, equal to, and 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.

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')

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.

9.If your programme is stuck in an endless loop, what keys you’ll press?

Ans. An infinite loop occurs when a program keeps executing within one loop, never leaving it. To exit out of infinite loops on the command line, press **CTRL + C** .

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

|  |  |  |
| --- | --- | --- |
| **Basis for comparison** | **break** | **continue** |
| continuation | The 'break 'stop the continuation of the loop. | The 'continue' does not stop the continuation of loop and it stops the current. |
| Other | It used with the 'switch', 'label' | Cannot be executed with switch and the labels. |

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

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.

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