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

**True and False**

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

**AND,NOT , OR**

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).

AND

|  |  |  |
| --- | --- | --- |
| 1 | 1 | 1 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 0 | 0 | 0 |

OR

|  |  |  |
| --- | --- | --- |
| 1 | 1 | 1 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 0 | 0 | 0 |

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?

**=,<,>,<=,>=,==,!=**

6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

**‘=’ assignment operator used to assign value to variable whereas ‘==’ equal to operator used to check equality between two variable/operands.**

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')

**ham**

**spam**

**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.

**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?

**Ctrl-C**

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

**Break:**

**This control loop statement is used to come out of loop if condition met.**

**Continue: This statement is used to continue the loop if comdition is met.**

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.

**for i in range 10:**

**print i**

**i = 1**

**while i<11 :**

**{**

**print i**

**i++**

**}**

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**