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

Ans: True =1, False =0

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

Ans: 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 ).**

AND:

|  |  |  |
| --- | --- | --- |
| INPUT | | OUTPUT |
| **F** | **F** | **F** |
| **F** | **T** | **F** |
| **T** | **F** | **F** |
| **T** | **T** | **T** |

OR

|  |  |  |
| --- | --- | --- |
| INPUT | | OUTPUT |
| **F** | **F** | **F** |
| **F** | **T** | **T** |
| **T** | **F** | **T** |
| **T** | **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))

(True and True) and (True == False) : FALSE

(not False) or (not True): TRUE

**5. What are the six comparison operators?**

Ans:

== Equals to

>= Greater than or equal

!= not equal

<= less than or equal

< less than

> Greater than

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

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

For assignment operator we use one equal sign ‘=’ (used for assigning variable)

For equal to operator we use double equal sign’==’(used in comparison)

**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.**

**spam = 0**

**if spam == 1:**

**print('Hello')**

**if spam == 2:**

**print('Howdy')**

**else:**

**print('Greetings')**

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

Ans: C or some time Ctrl+c

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

Ans: Break statement terminates the loop containing it

The continue statement is used to skip the rest of the code inside a loop for the current iteration only. Loop does not terminate but continues on with the next iteration.

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

Ans: In for loop range (10),range(0,10) **range(0, 10, 1)** iterates the given statement 10 times.

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(11):**

**print(i)**

**i=1**

**while i<11:**

**print(i)**

**i+=1**

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

spam.bacon()