**Rishabh Kant Jha’s assignment - 2**

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

**TRUE**

**FALSE**

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

**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 ).

**TRUTH TABLE**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **AND** | **OR** |
| **TRUE** | **TRUE** | **TRUE** | **TRUE** |
| **FALSE** | **TRUE** | **FALSE** | **TRUE** |
| **TRUE** | **FALSE** | **FALSE** | **TRUE** |
| **FALSE** | **FALSE** | **FALSE** | **FALSE** |

|  |  |
| --- | --- |
|  | **NOT** |
| **TRUE** | **FALSE** |
| **FALSE** | **TRUE** |

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) = **FALSE**

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.

**Equal : == >>5 ==6 >>FALSE**

**Assignment : = >>a=5 >>a >>5**

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')

**>>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 : jumps out of the current iterating loop but not the parent loop.**

**Continue : will continue the next iteration of loop without executing the following lines in the current scope of loop.**

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

**For I in range(0):**

**Print(i) >> will give out put from 0 to 9**

**For I in range(0,10):**

**Print(i) >> will give out put from 0 to 9**

**For I in range(0,10,1):**

**Print(i) >> will give out put from 0 to 9**

**For I in range(0,10,2):**

**Print(i) >>had it been range(0,10,2) output would have been 0,2,4,6,8**

**For I in range(0,10,3):**

**Print(i) >>had it been range(0,10,3) output would have been 0,3,6,9**

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)**

**i = 1**

**while True:**

**print(i)**

**i+=1**

**if i==10:**

**break**

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()**