**Basic Python – Assignment 2**

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

**-** The two types of Boolean data types are True and False. We write them with the first letter of true and false as capitals. E.g. True and False.

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

**-** And, Or and Not are the three different types of Boolean operators.

**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 evaluates).**

**-** Added in the notebook (GitHub)

**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)**

**-** Completed in the notebook (GitHub)

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

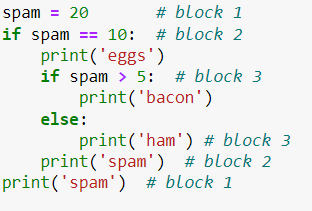
**-** Six comparison operators are:

* Less than <
* Greater than >
* Less than equal to <=
* Greater than equal to >=
* Equal to =
* Not equal to <> or !=

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

**-** A single equal to sign (=) is an assignment operator, whereas double equals to sign (==) is depicting equals to. E.g.; a = 10 (assigning that ‘a’ has a value 10) whereas “if a==10: we are checking the condition if ‘a’ equates to 10, then do XYZ as per the condition.

**7. Identify the three blocks in this code:**

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**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.**

**-** Please check the notebook attached (GitHub)

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

**-** Interrupt on the Jupyter Notebook.

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

**-** A break will stop the condition from running whereas continue will keep the condition going on.

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

**-** They all mean the same – range is a function that shows the range of the number given in the braces where the starting digit is 0 and the ending digit is not included.

Range (0,10,1) means it starts with a zero and goes till 9 with 1 as the jump (0,1,2,3,4,5,6,7,8,9)

Range (0,10,2) means it starts with a zero, goes till 9 with 2 as the jump (0,2,4,6,8)

**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.**

**-** Please check the notebook attached (GitHub)

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

**-** spam.bacon()