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

Two value of Boolean: True, False

2. 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 ).

**And(If any of the evaluation is false, final result will be false)**

True and True = True

True and False = False

False and True = False

False and False =False

**OR(If either of the evaluation is True, final result will be True)**

True or True = True

True or False = True

False or True = True

False or False =False

**NOT(original Evaluation will be reversed )**

True = False

False = True

(original >> **Reversed**)

True and False = False >>**True**

False and True = True >>**False**

False and False =False > **True**

4. What are the values of the following expressions?

Ans given in **bold** :

(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 a=2

Equal operator a==b

There is a syntax difference: For assignment = is used, while for Equal operator == is used.

Assignment operator is used when value needs to be assigned to a variable.

Equal operator will be used to evaluate some conditions. For Example : If a==b than c=3, else c=2.

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')

Ans :

Marked in Bold and underline are 3 indented block.

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.

Ans:

spam = 3

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?

Ans : Ctr+C twice in terminal.

Two times “I” in Jupyter Notebook.

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

Ans:

Break is used to exit out of the loop for every condition occurring once the break is encountered.

Continue is used to skip the execution of code for the current condition and continue to execute the for the next condition.

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

There is no difference between each of the range function.

If not specified, By default start will be assumed to be from 0 and gap will be assumed to be 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 Loop:**

for val in range(1,11,1):

print(val)

**While loop:**

v= 1

while v <= 10:

print(v)

v+=1

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

spam.bacon()