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

Ans :- Two Values of Boolean data type are True and False. The way of writing them is say for any variable x=True or x=False. Just to note the T and F are going to be in Capital else it's going to show an error.

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

Ans:- Three types of Boolean operator are 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 evaluates ).**

Ans:-

For AND

TRUE AND TRUE = TRUE 1 1 1  
TRUE AND FALSE = FALSE 1 0 0  
FALSE AND TRUE = FALSE 0 1 0

FALSE AND FALSE = FALSE 0 0 0

For OR

TRUE OR TRUE = TRUE 1 1 1

TRUE OR FALSE = TRUE 1 0 1

FALSE OR TRUE = TRUE 0 1 1  
FALSE OR FALSE = FALSE 0 0 0

For NOT

NOT TRUE = FALSE 0 1  
NOT FALSE = TRUE 1 0

**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)**

Ans:- False

False

True

Flase

False

True

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

Ans :- The six comparison operators are:-

>

>=

<

<=

==

!=

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

Ans:- When we use equals to that means that we are assigning a value to that particular variable or thing ex.:- x=10 here 10 is being assigned to x whereas when we use assignment operators like == that means we are comparing values ex.:- y=10 so x==y which would return True as both x and y have the same value.

**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:- The **First block** of if spam==10 then it will print eggs. The **second block** is if spam>5 which will print bacon and the **third block** is of else.

**9.If your program is stuck in an endless loop, what keys will you press?**

Ans:- We will press Ctrl+C

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

Ans :- When we use break statement it will break the statement at that particular point ex:- if x==4:

break

It will break the loop when x reaches 4

Whereas continue keep on moving from that point skipping that point. If x==4:

continue

It will skip 4 and continue from there.

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

Ans:- All 3 will show the same result i.e 0,1,2,3,4,5,6,7,8,9

**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.**

Ans :- for i in range(1,11):  
 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?**

Ans:- spam.bacon()