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

**Answer: There are two values of Boolean data type : True and False**

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

**Answer: Three types of Boolean operators 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 evaluate ).

**Answer:**

**And : True and True = True**

**True and False =False**

**False and False = False**

**False and True = False**

**Or:**

**True or True = True**

**True or False=True**

**False or False = False**

**False or True = True**

**Not :**

**not(True)= False**

**not(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) 🡪**True**

5. What are the six comparison operators?

**Answer : 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.

**Answer : Equal to operator (==) : used to compare the two values.E.g : if(a==b): do something**

**Assignment (=) : used to assign some value to a variable. E.g : a=10**

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print(&#39;eggs&#39;)

if spam &gt; 5:

print(&#39;bacon&#39;)

else:

print(&#39;ham&#39;)

print(&#39;spam&#39;)

print(&#39;spam&#39;)

**Answer :**

**spam = 0**

**#block 1 starts**

**if spam == 10:**

**print('&#39;eggs&#39;')**

**#block 1 ends**

**#block 2 starts**

**if spam &gt; 5:**

**print('&#39;bacon&#39;')**

**else:**

**print('&#39;ham&#39;')**

**#block 2 ends**

**#block 3 starts**

**print(&#39;spam&#39;)**

**print(&#39;spam&#39;)**

**#block 3 ends**

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.

**Answer :**

**spam = int(input())**

**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?

**Answer: we can use CTRL + C to exit the endless loop.**

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

**Answer:**

**break : The break statement terminates the loop containing it. Control of the program flows to the statement immediately after the body of the loop.**

**continue : 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)?

**Answer:**

**In a for loop all these will work similarly.**

**range function takes three parameter , start , end and steps. By default the step size is one and by default start=0.**

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.

**Answer:**

**#using for loop**

**for i in range(1,11):**

**print(i)**

**#using while loop**

**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?

**Answer : we can call it using the statement : spam.bacon()**