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

ANS:-The two values of the Boolean data type are True and False. They are written as True and False.

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

The three different types of Boolean Operators are Not, And , Or.

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).

not True = False

not False = True

True and True =True

True and False = False

False and True = False

False and False = False

True or True  = True

True or False = True

False or True = True

False or False = False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

Ans:- False

not (5 > 4)

Ans:-False

(5 > 4) or (3 == 5)

Ans:-True

not ((5 > 4) or (3 == 5))

Ans:-False

(True and True) and (True == False)

Ans:-False

(not False) or (not True)

Ans:-True

5. What are the six comparison operators?

Ans:-The six comparison operators are as follows

== equal to

!= Not equal to

> Greater than

< less than

>= Greater than equal to

<= Less than equal to

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

Ans:-= It works like an assignment operator and stores values for a variable. Eg a=5 ,a is assigned the value as 5.

== It represents the comparison between two operators and it is measured as value equal to. Eg 6==6 t will return True as both the values are same .If not equal it returns False.

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:-In the above program the output will be as follows

Ham

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?

Ans:-If the program is stuck in an endless loop , we can press CTRL+C to break the loop

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

ANS:-Break and continue statements are used in loop.In the case of BREAK it immediately breaks the loops and exits from immediate iteration but in the case of Continue it will the stop the immediate looping and jump to the next iteration. In continue it stops the current execution of the statement and the next looping statements are executed.

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

Ans:-range (10)-It print number from 0 excluding 10 i.e. it prints number up to 9.

Range(0,10)-It print number in the range of 0 to 9.

Range(0,10,1)-It print number in the range of 0 to 9 with increment of 1 in each iteration.

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 i <= 10:

print(i)

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:-Without importing spam, function named bacon () can be called like spam.bacon()