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

Answer:- Boolean is a one of the python data type. It has two values and they are:-

```
1> True
2> False
```

Que:-2 What are the three different types of Boolean operators?

Answer:- The boolean operator which is also called as logical operator that are used to compare values.

```
 These operators are:-
1> and
2> or
3> and not
```

Que:-3Make a list of each Boolean operator's truth tables (i.e. every possible combination of Booleanvalues for the operator and what it evaluate).

Answer:- The Boolean data type can be one of two values, either True or False.

We use Booleans in programming to make comparisons and to determine the flow of control in a given program.

```
    x == y        >>      Return condition


True == True   >>     True
True == False  >>     False
False == True  >>     False
False == False  >>    True


    x and y          Return condition


True  and True   >>     True
True  and False  >>     False
False and True   >>     False
False and False  >>     False



    x or y           Return calculation


True or True     >>       True
True or False    >>       True
False or True    >>       True
False or False   >>       False
```

Que:-4 What are the values of the following expressions?

Answer:-

```
                    final values
   (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
```

Que:-5 What are the six comparison operators?

Answer:-

```
1> Less Than  (<)
2> Greater Than (>)
3> Less Than or equal to (<=)
4> Greater Than or equal to (>=)
5> Equal to (==)
6> Not Equal to (!=)
```

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

Answer:-

```
The assignment operator is (=) it is used assign the value of the right hand side of the variablein
python program.

    Example:-

            variable = 35

    The equal to (==) operator, it is used to check whether the two condition,value equal or not. If the
value is equal
    then it return True.

    Example:-

            5 == 5 >> True
            5 == 4 >> False
```

Que:-7Identify the three blocks in this code:

Answer:-

```
    The three block are everything inside the if block statment.

    like print("eggs")
        print("bacon")
        print("ham")
        print("spam")
```

Que:-8Write 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:-

```
if spam == 1:
    print("Hello")
elif spam == 2:
    print("Howdy")
elif:
    print("Greetings")
```

Que:-9 If your programme is stuck in an endless loop, what keys you'll press?

Answer:-

In order to come out of the infinite loop, we can use the break statement or You can stop an infini
te loop with   CTRL + C.

Que:-10 How can you tell the difference between break and continue?

Answer:-

1) The break statement allows the control to exit the loop and the continue statement allows the co
ntrol to   continue to the next iteration of the loop.

2) Break statement also stop the entire process of the loop and continue statement
   only stops the current iteration of the loop.

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

Answer:-

```
       To loop through code a specified number of times, we can use the range() function.The range() functi
on
        returns a sequence of numbers, starting from 0 by default, and increments by 1 (by default).
        like:-> range(10) means it start from the 0 and ends with number 9.
                range(0,10) here also it start with 0 and ends with number 9.
                range(0,10,1) here it start with 0 and jump one by one on another value in forward directio
n.
                (0,1,2,3,4,5,6,7,8,9) it exclude the end index in the value.
```

Que:-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.

In [1]:
```python
1  #Answer:- By using for loop
2
3  for i in range(1,11):
4      print(i)
```

```
1
2
3
4
5
6
7
8
9
10
```

```
In [2]:    1  #Answer:- By using while loop
           2
           3  a = 1
           4  while a<11:
           5      print(a)
           6      a += 1
```

```
1
2
3
4
5
6
7
8
9
10
```

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

Answer:-

```
This function can be called with spam.bacon().
```