Python Assignment - 4

1) How does break continue and pass work?

- The **break statement** is used to terminate the loop or statement in which it is present. After that, the control will pass to the statements that are present after the break statement

- **Continue** is also a loop control statement just like the break statement. continue statement is opposite to the break statement, instead of terminating the loop, it forces to execute the next iteration of the loop

- The **pass statement** in Python is used when a statement is required syntactically but you do not want any command or code to execute. It is like a null operation, as nothing will happen if it is executed.

2) difference between a list and a tuple in python?

The key difference between the tuples and lists is that while the **tuples are immutable objects** the **lists are mutable**. This means that tuples cannot be changed while the lists can be modified.

3) what are functions in python?

A function is a block of code that only runs when it is called. You can pass data, known as parameters, into a function. A **function can return data as a result**.

4) what is a lambda function in python?

A **Lambda Function in Python** programming is an anonymous function or a function having no name. It is a small and restricted function having no more than one line. Just like a normal function, a Lambda function can have multiple arguments with one expression.

5) how can you generate random numbers in python?

- Python can generate such random numbers by using the random module.
- Randint () method along with a for loop to generate a list of numbers. We first create an empty list and then append the random numbers generated to the empty list one by one.

6) what is the difference between range and xrange?

The range () and x-range () are two functions that could be used to iterate a certain number of times in for loops in Python. In Python 3, there is no xrange, but the range function behaves like xrange in Python 2. If you want to write code that will run on both Python 2 and Python 3, you should use range ().
- **range ()** – This returns a range object (a type of inerrable).
- **X-range ()** – This function returns the **generator object** that can be used to display numbers only by looping. The only particular range is displayed on demand and hence called **lazy evaluation**.

7) how do you write comments in python?

Comments in Python begin with a hash mark (#) and whitespace character and continue to the end of the line. Because comments do not execute, when you run a program, you will not see any indication of the comment there. Comments are in the source code for humans to read, not for computers to execute.