Module 2 Assignment

- **1) What is List? How will you reverse a list?**

Reverse() method in Python is a built-in method that reverses the list in place. Reversing the list in place means that the method modifies and changes the original list.

- **02) How will you remove last object from a list? Suppose list1 is [2, 33, 222, 14, and 25], what is list1 [-1]?**

The answer is [2, 33, 222, 14]

- **03) Differentiate between append () and extend () methods?**

Append function in Python adds a single element to the end of the list, whereas the extend function adds multiple elements (from an iterable) to the list. Append takes a single element as an argument, while extend takes an iterable as an argument.

- **18) What is tuple? Difference between list and tuple.**

The primary difference between tuples and lists is that tuples are immutable as opposed to lists which are mutable. Therefore, it is possible to change a list but not a tuple.

- **43) Why Do You Use the Zip Method in Python?**

Python's zip() function creates an iterator that will aggregate elements from two or more iterables. You can use the resulting iterator to quickly and consistently solve common programming problems, like creating dictionaries.

- **52) How Many Basic Types of Functions Are Available in Python?**

There are two types of functions in the python programming language.

1) Built-in functions- There are 68 built-in functions in the Python programming language.
2) User-defined functions- To define a user-defined function, the def keyword is used.

- **56) How can you pick a random item from a range?**
1. Using random.randrange() function.
2. Using random.randint() function.
3. Using random.random() function.
4. Using random.sample() function.