1. What is List? How will you reverse a list?

A list is a data structure in python which is mutable and ordered collection of elements in that each element or value is called an item of list.

We can reverse any created list by passing it in reverse function.

Example: L = [10,20,30,40,50]

reverse(L)

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

We can remove last object from list using remove function and negative indexing that is provided in-built in python.

Negative indexing in python starts from -1 so list1[-1] in [2,33,222,14, and 23]

represents the value 25 in list.

1. Differentiate between append () and extend () methods?

Append method in python adds a single element to the end of the list where the extend method adds multiple elements to the list.

Append takes a single element as an argument, while extend takes a sequence as an argument.

1. How will you compare two lists?

We can use sort function and double equal (==) operator to compare two list in python. Firstly, sort function arranges the items of list in ascending order then check if they are identical or not using comparison operator.

1. How will you create a dictionary using tuples in python?

We can create dictionary from tuples using setdefault() function by passing each values of tuples as key and value pair through the loop.

1. How Do You Traverse Through A Dictionary Object in Python?

To Iterate through values in a dictionary we can use built-in methods like values(), items() or even directly iterate over the dictionary to access values with keys.

1. How Do You Check the Presence of a Key in A Dictionary?

The in keyword can be to check if a key exists in a dictionary. It returns a Boolean value of True if the key is present otherwise false.

1. Why Do You Use the Zip () Method in Python?

The zip function is a built-in function that allows you to aggregate elements from multiple iterables into a single iterable. It takes two or more iterables as input and returns an iterator that produces tuples containing elements from all the input iterables.

1. How many Basic Types of Functions Are Available in Python?

There are two types of functions available in python,

1. User-Defined Functions - These types of functions are defined by the user to perform any specific task.
2. Built-in Functions - These types of functions are pre-defined in python.
3. can you pick a random item from a list or tuple?

In order to pick a random item from tuple or list we can use choice() method of random module which returns a random element from the specified sequence by passing the tuple or list as an argument to the choice() function.

1. How can you pick a random item from a range?

We can pick random item from range by using the randrange() method of random module which returns a random number within the specified range by passing minimum and maximum numbers as arguments.

1. How can you get a random number in python?

We can get random number by using the randint() method of random module which returns a random number by passing minimum and maximum numbers as arguments.

1. How will you set the starting value in generating random numbers?

We can pass two arguments inside the method to represent starting and ending values of numbers.

1. How will you randomize the items of a list in place?

We can randomize the items of list by using shuffle() method of random module which changes the position of items in a list.