|  |  |
| --- | --- |
| Que 1 | What is List? How will you reverse a list? |
| Ans: | * A Python list is an ordered and changeable collection of data objects. * Unlike an array, which can contain objects of a single type, a list can contain a mixture of objects. * Using the reversed() and reverse() built-in function we can reverse the list. |
| Que 2 | How will you remove last object from a list? Suppose list1 is [2, 33, 222, 14, and 25], what is list1 [-1]? |
| Ans: | * The method pop() can be used to remove and return the last value from the list or the given index value. If the index is not given, then the last element is popped out and removed. * [2, 33, 222, 14,25] * Here negative indexing starts from right end that means the index of 25 is -1 |
| Que 3 | Differentiate between append () and extend () methods? |
| Ans: | * The append() method in the Python programming language adds an item to a list that already exists whereas the extend() method adds each of the iterable elements which is supplied as a parameter to the end of the original list. |
| Que 4 | What is tuple? Difference between list and tuple. |
| Ans: | * It is also a sequence data type capable of containing elements of multiple data types, and they are immutable. * Difference :-- * LIST:--  1. A list is mutable in nature. 2. It comes with multiple in-built methods. 3. It is very helpful in the case of deletion and insertion operations.  * TUPLE:--  1. A tuple is immutable in nature. 2. These have comparatively lesser built-in methods in them. 3. It is comparatively helpful in the case of read-only operations, such as accessing elements. |
| Que 35 | How Do You Traverse Through A Dictionary Object In Python? |
| Ans: | * In Python, you can traverse through a dictionary using various methods. * Here are a few common ways to iterate over the items in a dictionary :   (1) Using a For Loop:  d = {'a': 1, 'b': 2, 'c': 3}  for key, value in d.items():  print(f"Key: {key}, Value: {value}")  (2) Using Keys:  d = {'a': 1, 'b': 2, 'c': 3}  for key in d:  print(f"Key: {key}, Value: {d[key]}")  (3) Using Values:  d = {'a': 1, 'b': 2, 'c': 3}  for value in d.values():  print(f"Value: {value}") |
| Que 43 | Why Do You Use the Zip () Method in Python? |
| Ans: | * The zip() function returns a zip object, which is an iterator of tuples where * the first item in each passed iterator is paired together, and then the second * item in each passed iterator are paired together etc |
| Que 51 | How Many Basic Types Of Functions Are Available In Python? |
| Ans: | * There are two types of functions 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 are pre-defined functions in python. |
| Que 52 | How can you pick a random item from a list or tuple? |
| Ans: | * In Python, you can use the 'random.choice()' function from the random module to pick a random item from a list or tuple. |
| Que 53 | How can you pick a random item from a range? |
| Ans: | * Use the 'random.randrange()' function(Returns a random number within the specified range) to generate a random number within the given range by passing minimum, and maximum numbers as arguments. |
| Que 54 | Que-54 : How can you get a random number in python? |
| Ans: | * Using 'random.randint(a, b)' for an integer between a and b (inclusive)   Example:--  import random  num = random.randint(1, 10)  print(num) |
| Que 55 | How will you set the starting value in generating random numbers? |
| Ans: | * To generate random numbers with a specific starting value, you typically use a seed value.   import random  random.seed(50)  print(random.randint(1,100)) |