**1. What is a List?**

A list is a collection of items in a particular order. Lists allow you to store sets of information in one place, whether the values are related or not.

**2. How will you reverse a list?**

You can reverse a list using the reverse() method or the slicing technique.

**3. How will you remove the last object from a list?**

You can remove the last object from a list using the pop() method.

**4. Suppose list1 is [2, 33, 222, 14, 25], what is list1[-1]?**

list1[-1] gives the last element of the list, which is 25.

**5. Differentiate between append() and extend() methods?**

append(): Adds its argument as a single element to the end of a list. The length of the list will increase by one.

extend(): Iterates over its argument adding each element to the list and extending the list. The length of the list will increase by however many elements were in the iterable.

**7. How will you compare two lists?**

You can compare two lists using the equality operator ==.

**20 Tuple and Differences Between List and Tuple**

• **Tuple**: An ordered collection of elements that is immutable.

• **Difference**:

• **Mutability**: Lists are mutable, tuples are immutable.

• **Syntax**: Lists use square brackets [], tuples use parentheses ().

• **Usage**: Tuples are used for fixed data, lists for variable data.

**46 Why Do You Use the zip() Method in Python?**

The zip() method is used to combine two or more iterables (e.g., lists, tuples) element-wise. It returns an iterator of tuples, where the first element of each tuple is taken from the first iterable, the second from the second iterable, and so on.

58 **Lambda Function in Python**

A lambda function is a small anonymous function defined with the lambda keyword. It can take any number of arguments but only has one expression.

59. **Basic Types of Functions in Python**

There are two basic types of functions in Python:

1. Built-in functions: Functions that are predefined in Python, such as len(), print(), etc.

2. User-defined functions: Functions defined by users using the def keyword.