

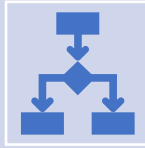
PYTHON-BASIC TO INTERMEDIATE

Learn with N@ima

Day 4

Lists and Tuples

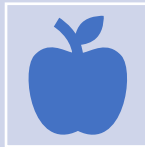
Python List



Lists are used to store multiple items in a single variable.



Python lists are containers to store a set of values of any data type.



```
List1 = ["apple", "banana", 6, false]
```

List indexing

List indexing:

A list can be indexed just like a string.

```
L1 = ["apple", "banana", 6, false]
```

```
L1[2] → 6
```

List Methods

1. The `sort()` method sorts the list ascending by default.
2. The `reverse()` method reverses the sorting order of the elements.
3. The `append()` method appends an element to the end of the list.
4. The `insert()` method inserts the specified value at the specified position.
5. The `pop()` method removes the element at the specified position.
6. The `remove()` method removes the first occurrence of the element with the specified value.

Tuple

A **tuple** is an **immutable** data type in python.

❖ Immutable means cannot change.

- ordered and
- unchangeable
- Allow Duplicates
- Tuples are written with round brackets.

Tuple Methods

Python has two built-in methods that you can use on tuples.

1. The `count()` method returns the number of times a specified value appears in the tuple. **`tuple.count(value)`**
2. The `index()` method finds the first occurrence of the specified value. The `index()` method raises an exception if the value is not found. **`tuple.index(value)`**

Practice Work

1. Write a program to store seven names in a list by the user.
2. Write a program to accept marks of 9 students and display them in a sorted manner.
3. Write a program to count the number of 2's in the following tuple: $x = (4, 2, 5, 2, 6, 2)$
4. Write a program to sum a list with 5 numbers.



THANK YOU

