

List

- Lists are used to store multiple items in single variable.
- Lists are created using square brackets.
- List items are ordered and changeable.

List Methods

1. `append()` Adds an element at the end of the list.
2. `clear()` Removes all the elements from the list.
3. `copy()` Returns a copy of the list.
4. `count()` Returns the number of elements with the specified value.
5. `extend()` Add the elements of list to end of current list.
6. `index()` Returns the index of the first element with the specified value.
7. `insert()` Adds an element at the specified position.

8. `pop()` Removes the element at the specified position.
9. `remove()` Removes the item with the specified value.
10. `reverse()` Reverses the order of the list.
11. `sort()` Sorts the list.

List Examples :

1. From below list, replace 4 with 44.
`my-list = [1, 2, 3, 4, 5]`
`my-list[3] = 44`
`print(my-list)`

$\Rightarrow [1, 2, 3, 44, 5]$

2. From below list replace add (insert) 200 at index 3.
`my-list = [1, 2, 3, 4, 5]`
`my-list[3] = 200`
`print(my-list)`

$\Rightarrow [1, 2, 3, 200, 5]$

3. In below list add new number 66.

```
my_list = [1, 2, 3, 4, 5]
```

```
my_list.append(66)
```

```
print(my_list)
```

=> [1, 2, 3, 4, 5, 66]

4. In below list insert new numbers.

```
my_list = [1, 2, 3, 4, 5]
```

```
my_list.extend([66, 87, 99])
```

```
print(my_list)
```

=> [1, 2, 3, 4, 5, 66, 87, 99]

5. From below list, remove number 3.

```
my_list = [1, 2, 3, 4, 5]
```

```
my_list.remove(3)
```

```
print(my_list)
```

=> [1, 2, 4, 5]