

# Python List Manipulation Task

In [1]: ▶ ListManipulator = []

In [2]: ▶ ListManipulator = ["Mahesh", "anusha", "siva"]

In [3]: ▶ *# Take a list of elements as a parameter and appends them to the internal*

```
ListManipulator = ["Mahesh", "anusha", "siva"]
ListManipulator.append("Suri")
print(ListManipulator)
```

['Mahesh', 'anusha', 'siva', 'Suri']

In [4]: ▶ *# Remove Duplicate values from the internal list*

```
ListManipulator = ["Mahesh", "anusha", "siva", 'Suri', "Mahesh", "Venu", "Suri"]
new_list = []
for item in ListManipulator:
    if item not in new_list:
        new_list.append(item)
print(new_list)
```

['Mahesh', 'anusha', 'siva', 'Suri', 'Venu']

In [5]: ▶ *# Reverse the order of the elements in the internal list*

```
ListManipulator = ["Mahesh", "anusha", "siva", 'Suri', "Mahesh", "Venu", "Suri"]
ListManipulator.reverse()
print(ListManipulator)
```

['Suri', 'Venu', 'Mahesh', 'Suri', 'siva', 'anusha', 'Mahesh']

In [6]: ▶ *# Sort the elements in the internal list in ascending order*

```
my_list = [3, 1, 4, 1, 5, 9, 2, 6, 5, 3, 5]
my_list.sort()
print(my_list)
```

[1, 1, 2, 3, 3, 4, 5, 5, 5, 6, 9]

```
In [7]: ▶ # Get unique elements

ListManipulator = ["Mahesh", "anusha", "siva", 'Suri', "Mahesh", "Venu", "Suri"]
unique_elements = list(set(ListManipulator))
print(unique_elements)

['anusha', 'Suri', 'Venu', 'Mahesh', 'siva']
```

```
In [8]: ▶ # remove elements as a parameter and appends them to the internal list

ListManipulator = ["Mahesh", "anusha", "siva", "Suri"]
ListManipulator.remove("Suri")
print(ListManipulator)

['Mahesh', 'anusha', 'siva']
```

```
In [9]: ▶ # Returns the current state of the internal list

class ListManipulator:
    def __init__(self, elements=[]):
        self.elements = elements

    def get_elements(self):
        return self.elements

# Create an instance of ListManipulator
list_manipulator = ListManipulator([1, 2, 3, 4])

# Retrieve the current state of the internal list value
current_list_state = list_manipulator.get_elements()

print(current_list_state) # Output: [1, 2, 3, 4]

[1, 2, 3, 4]
```