Add Element to List (append)

```
# Add element at the end of the list
my_list = []
my_list.append(10)
my_list.append(20)
print("List after adding:", my_list)

#  Time Complexity: O(1) on average
```

```
List after adding: [10, 20]
```

Get Element from List (by Index)

```
# Access element using index
my_list = [10, 20, 30]
print("Element at index 1:", my_list[1])  # Output: 20

#  Time Complexity: O(1)
```

```
Element at index 1: 20
```

Set/Update Element in List

```
# Update element at specific index
my_list = [10, 20, 30]
my_list[1] = 25
print("List after update:", my_list)

#  Time Complexity: O(1)
```

```
List after update: [10, 25, 30]
```

Remove Element from List (by Value)

```
# Remove first occurrence of a value
my_list = [10, 20, 30]
my_list.remove(20)
print("List after removing 20:", my_list)

#  Time Complexity: O(n) – has to search for the value first
```

```
List after removing 20: [10, 30]
```

Check if List Contains an Element

```
# Check if a value exists in the list
my_list = [10, 20, 30]
if 30 in my_list:
    print("□ 30 is in the list.")
else:
    print("□ 30 is not in the list.")

#  Time Complexity: O(n)
```

```
□ 30 is in the list.
```