

```
list1 = [1, 2, "Python", "Program" , 15.9]
list2 = ["Amy", "Ryan", "Henry", "Emma"]
print(list1)
print(list2)
print(type(list1))
print(type(list2))
```

```
[1, 2, 'Python', 'Program', 15.9]
['Amy', 'Ryan', 'Henry', 'Emma']
<class 'list'>
<class 'list'>
```

```
a = [1, 2, "Ram", 3.50, "Rahul", 5, 6]
b = [1, 2, "Ram", 3.50, "Rahul", 5, 6]
a == b
```

```
True
```

```
List = [0,1,2,3,4,5]
List[0]
List[1]
List[2]
List[3]
List[4]
List[5]
List[0:]
List[::]
List[2:4]
List[1:3]
List[4]
```

```
[0, 1, 2, 3]
```

```
list = [1,2,3,4,5,6,7]
print(list[0])
```

```
1
```

```
print(list[1])
```

```
2
```

```
print(list[0:6])
```

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

```
print(list[1:6:2])
```

```
[2, 4, 6]
```

```
list = [1,2,3,4,5,6]
print(list[-1])
```

```
5
```

```
print(list[-3:])
```

```
[3, 4, 5]
```

```
print(list[-3:-1])
```

```
[3, 4]
```

```
list[2] = 10
print(list)
```

```
[1, 2, 10, 4, 5]
```

```
list[1:3] = [89,78]
print(list)
```

```
[1, 89, 78, 4, 5]
```

```
list[-1] = 25
print(list)
```

```
[1, 89, 78, 4, 25]
```

```
list1 = [12, 14, 16, 18, 20]
I = list1 * 2
print(I)

[12, 14, 16, 18, 20, 12, 14, 16, 18, 20]
```

```
list2 = [9, 10, 32, 54, 36]
I = list1 + list2
print(I)

[12, 14, 16, 18, 20, 9, 10, 32, 54, 36]
```

```
list7 = [12, 14, 16, 18, 20, 23, 27, 39, 40]
len(list7)
```

```
9
```

```
for i in list1:
    print(i)
```

```
12
14
16
18
20
```

```
print(12 in list1)
```

```
True
```

```
print(700 in list1)
```

```
False
```

```
list = ["John", "Peter", "Vicky"]
for i in list:
    print(i)
```

```
John
Peter
Vicky
```

```
I = []
n = int(input("Enter the number of elements in the list"))
for i in range (0,n):
    I.append(input("Enter the element:"))
print("printing the list items...")
for i in I:
    print(i, end = " ")
```

```
Enter the number of elements in the list2
Enter the element:4
Enter the element:7
printing the list items...
4 7
```

```
list = [0,1,2,3,4,5]
print("Printing Original List:")
for i in list:
    print(i, end = " ")
list.remove(2)
print("\nPrinting List after removing element:")
for i in list:
    print(i, end = " ")
```

```
Printing Original List:
0 1 2 3 4 5
Printing List after removing element:
0 1 3 4 5
```

```
import copy

old_list = [[1,2,3], [4,5,6], [7,8,9]]
new_list = copy.copy(old_list)

print("Old list:", old_list)
print("New list:", new_list)
```

```
Old list: [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
New list: [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
```

```
import copy

old_list = [[1,1,1], [2,2,2], [3,3,3]]
new_list = copy.copy(old_list)

old_list.append([4,4,4])
print("Old list:", old_list)
print("New list:", new_list)
```

```
Old list: [[1, 1, 1], [2, 2, 2], [3, 3, 3], [4, 4, 4]]
New list: [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
```

```
import copy

old_list = [[1,1,1], [2,2,2], [3,3,3]]
new_list = copy.copy(old_list)
old_list[1][1] = 'AA'
print("Old list:", old_list)
print("New list:", new_list)
```

```
Old list: [[1, 1, 1], [2, 'AA', 2], [3, 3, 3]]
New list: [[1, 1, 1], [2, 'AA', 2], [3, 3, 3]]
```

```
import copy

old_list = [[1,1,1], [2,2,2], [3,3,3]]
new_list = copy.deepcopy(old_list)
print("Old list:", old_list)
print("New list:", new_list)
```

```
Old list: [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
New list: [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
```

```
import copy
old_list = [[1,1,1], [2,2,2], [3,3,3]]
new_list = copy.deepcopy(old_list)
old_list[1][0] = 'BB'
print("Old list:", old_list)
print("New list:", new_list)
```

```
Old list: [[1, 1, 1], ['BB', 2, 2], [3, 3, 3]]
New list: [[1, 1, 1], [2, 2, 2], [3, 3, 3]]
```