

```
In [2]: # Map (function,*iterable)

c_areas=[4.567732,6.563468,2.1019444,92.134334,87.0700356]

result = list(map(round, c_areas, range(1,7)))
print(result)

[4.6, 6.56, 2.102, 92.1343, 87.07004]
```

```
In [3]: a_strings = ['g', 'h', 'k', 'd', 'e']
a_numbers = [6,7,8,9,5]

results = list(map(lambda x, y: (x, y), a_strings, a_numbers))

print(results)

[('g', 6), ('h', 7), ('k', 8), ('d', 9), ('e', 5)]
```

```
In [4]: # list havig numbers

list1 = [2,4,6,8,18,32,14,11]
print(list1)

# To know length of list
print(len(list1))

list1.sort()
print(list1)

list1.sort(reverse=True)
print(list1)

[2, 4, 6, 8, 18, 32, 14, 11]
8
[2, 4, 6, 8, 11, 14, 18, 32]
[32, 18, 14, 11, 8, 6, 4, 2]
```

```
In [5]: # List having numbers

list1 = [2,4,6,8,32,14,12]
print(list1)

templist1=sorted(list1)
print(templist1)
print(list1)

templist2=sorted(list1,reverse=True)
print(templist2)
print(list1)

[2, 4, 6, 8, 32, 14, 12]
[2, 4, 6, 8, 12, 14, 32]
[2, 4, 6, 8, 32, 14, 12]
[32, 14, 12, 8, 6, 4, 2]
[2, 4, 6, 8, 32, 14, 12]
```

```
In [6]: # List having numbers
list1 = [2,4,6,5,56,47]
print(list1)

templis=list1.sort()
print(templis)

list1.sort(reverse=True)
print(list1)

[2, 4, 6, 5, 56, 47]
None
```

[56, 47, 6, 5, 4, 2]

```
In [10]: # List having numbers

list1 = [2,4,6,5,32,85]
print(list1)

list1.reverse()
print(list1)

print(list1.index(32))
print(list1.index(6))
```

```
[2, 4, 6, 5, 32, 85]
[85, 32, 5, 6, 4, 2]
1
3
```

```
In [14]: # List having numbers

list1 = [2,4,6,34,21]
list2=list1 # Both object pointing on the same memory
print(list1)
print(list2)
print()
print(id(list1))
print(id(list2))
list1.append(77)
print((list1))
print((list2))
```

```
[2, 4, 6, 34, 21]
[2, 4, 6, 34, 21]

2162137751104
2162137751104
[2, 4, 6, 34, 21, 77]
[2, 4, 6, 34, 21, 77]
```

```
In [15]: # COPY LIST
# list having numbers
list1 = [2,4,6,34,21]
list2=list1[:]
print(list2)
print(id(list1))
print(id(list2)) # i'd of both object will be different
list1.append(79)
print((list1))
print((list2))
```

```
[2, 4, 6, 34, 21]
2162137777920
2162138342528
[2, 4, 6, 34, 21, 79]
[2, 4, 6, 34, 21]
```

REMOVING ELEMENTS

- 1.Remove all items:clear()
- 2.Remove all item by index and get its value:pop()
- 3.Remove an item by value:remove()
- 4.Remove items by index or slice:del

```
In [16]: rlist1 = list(range(12,20))
print(rlist1)

#clear
rlist1.clear()
print(rlist1)
```

```
[12, 13, 14, 15, 16, 17, 18, 19]
```

[]

```
In [18]: rlist1 = list(range(12,20))
print(rlist1)

#pop
print(rlist1.pop(3))

print(rlist1.pop())

#remove
rlist1.remove(16)
print(rlist1)

#del
del rlist1[2]
print(rlist1)

[12, 13, 14, 15, 16, 17, 18, 19]
15
19
[12, 13, 14, 17, 18]
[12, 13, 17, 18]
```

```
In [19]: rlist1 = list(range(12,20))
          print(rlist1)

          del rlist1[2:6]
          print(rlist1)

[12, 13, 14, 15, 16, 17, 18, 19]
[12, 13, 18, 19]
```

```
In [20]: list1 = [2,4,6,5,15,9,3]
a=sorted(list1)
print(a)
if(a==sorted(list1)):
    print("yes sorted")
else:
    print("not sorted")

[2, 3, 4, 5, 6, 9, 15]
yes sorted
```

```
In [21]: list1=[2,4,6,77,45,3,9]
          print(list1[::-1])
```

[9, 3, 45, 77, 6, 4, 2]

[illegible]