

```
In [5]: print("List Manipulation")
lis = []
n = int(input("enter total number of elements\n"))
for i in range(0,n):
    ele = int(input())
    lis.append(ele)
print("List Items", lis)
print("Length of List", len(lis))
print("Fourth(Index) Item of List", lis[3])
print("Last three items of list",lis[2:])
print("Except first two items of list",lis[2:])
lis.reverse()
print("Reverse Order",lis)
print("Maximum Number", max(lis))
print("Minimum Number", min(lis))
print("Sum of all Numbers",sum(lis))
lis.reverse()
id = 0
try:
    idx = lis.index(id)
    if (idx > 0):
        print("Zero exists at ", lis.index(0))
except ValueError:
    print("Zero Not Exists")
lis.sort()
print("Sorted list" , lis)
lis.pop(0)
print("List after removing first Integer", lis)
lis[1]=9
lis[2]=8
lis[3]=7
lis.insert(5,6)
print("Modified List",lis)
lis.append(-500)
print("After appending",lis)
```

```
List Manipulation
enter total number of elements
5
4
3
2
5
6
List Items [4, 3, 2, 5, 6]
Length of List 5
Fourth(Index) Item of List 5
Last three items of list [2, 5, 6]
Except first two items of list [2, 5, 6]
Reverse Order [6, 5, 2, 3, 4]
Maximum Number 6
Minimum Number 2
Sum of all Numbers 20
Zero Not Exists
Sorted list [2, 3, 4, 5, 6]
List after removing first Integer [3, 4, 5, 6]
Modified List [3, 9, 8, 7, 6]
After appending [3, 9, 8, 7, 6, -500]
```

```
In [6]: print("List Manipulation")
lis = []
n = int(input("enter total number of elements\n"))
for i in range(0,n):
    ele = int(input())
    lis.append(ele)
print("Index of minimum item in lis", lis.index(min(lis)))
```

```
List Manipulation
enter total number of elements
5
1
2
3
4
5
Index of minimum item in lis 0
```

```
In [8]: from collections import Counter
print("Program on Counter")
lis = []
n = int(input("enter number of lower case letters\n"))
for i in range(0,n):
    ele = input()
    lis.append(ele)
print("Set of alphabets with values in sorted order", sorted(Counter(lis).most_common()))
```

```
Program on Counter
enter number of lower case letters
5
s
d
f
g
s
Set of alphabets with values in sorted order [('d', 1), ('f', 1), ('g', 1), ('s', 2)]
```

```
In [9]: print(" Dictionary Manipulation ")
dict={'abc':7,'def':11,'ghi':13,'jkl':17,'mno':19}
print("Value of def", dict.get('def'))
print("All Keys", dict.keys())
for k,v in dict.items():
    print(k,v)
key='pqr'
def check(dict,key):
    if key in dict.keys():
        print("Key pqr is present wth value", dict[key])
    else:
        print("Key pqr is not present")
check(dict,key)
dict['abc'] = 23
for v in dict.values():
    print(v)
```

```
Dictionary Manipulation
Value of def 11
All Keys dict_keys(['abc', 'def', 'ghi', 'jkl', 'mno'])
abc 7
def 11
ghi 13
jkl 17
mno 19
Key pqr is not present
23
11
13
17
19
```

In [ ]: