

1. Write a program to find sum of all elements of list.

```
li = [1, 2, 3, 4, 5]
sum = 0
for i in li:
    sum = sum + i
print ("Sum:", sum)
```

2. Write a program to find maximum and minimum element in a list.

```
li = [20, 15, 30, 50, 10, 40]
max = li [0]
min = li [0]
for i in li:
    if i > max:
        max = i
    if i < min:
        min = i

print ("Max:", max)
print ("Min:", min)
```

3. Write a program to find the second largest element in the list.

```
li = [1, 4, 6, 7, 5]
max = li [0]
smax = 0

for i in range (1, len(li)):
    if (max < li[i]):
        smax = max
        max = li[i]
    elif(smax < li[i]):
        smax = li[i]

print ("Max:", max)
print ("Smax:", smax)
```

4. Write a program to reverse the list.

```
li = [1, 2, 3, 4, 5]
reverse_list = li[::-1]
print ("Reverse List:", reverse_list)
```

- 5. Accept a number from user and check if this element is present in the list or not. Also tell how many times it is present in the list.**

```
li = [1, 2, 3, 2, 4, 2]
num = int (input ("Enter a number:"))

count = 0
for i in li:
    if i == num:
        count += 1

if count > 0:
    print ("Number is present", count)
else:
    print ("Number is not present")
```

- 6. Write a program to remove duplicates from the list.**

```
li = [1, 2, 2, 3, 4, 4, 5]
new_li = []

for i in li:
    if i not in new_li:
        new_li.append(i)
print(new_li)
```

- 7. Write a program to create a new list from existing list which contains cube of each number of list.**

```
li = [1, 2, 3, 4, 5]
cube_li = []

for i in li:
    cube_li.append(i ** 3)
print ("Cube List:", cube_li)
```

8. Write a program to create a duplicate of an existing list. It should not point to same list.

```
li1 = [10, 20, 30, 40]
li2 = li1[:]

print ("Original List:", li1)
print ("Copied List: ", li2)
```

9. WAP to find out even and odd in the list.

```
li = [1, 2, 3, 4, 5, 6]
even = []
odd = []

for i in li:
    if i % 2 == 0:
        even.append(i)
    else:
        odd.append(i)

print ("Even:", even)
print ("Odd:", odd)
```

10. Write a program to remove all occurrences of a given element in the list.

```
li = [1, 2, 3, 2, 4, 2, 5]
num = int (input ("Enter number to remove: "))
new_li = []

for i in li:
    if i!= num:
        new_li.append(i)
print(new_li)
```

11. Write a program to print all numbers which are divisible by m and n in the list.

```
li = [10, 15, 20, 30, 45, 60]
m = int (input ("Enter m:"))
n = int (input ("Enter n:"))

for i in li:
    if i % m == 0 and i % n == 0:
        print(i)
```

12. Write a program to create three lists of numbers, their squares and cubes.

```
numbers = [1, 2, 3, 4, 5]
squares = []
cubes = []

for i in numbers:
    squares.append(i ** 2)
    cubes.append(i ** 3)

print ("Numbers:", numbers)
print ("Squares:", squares)
print ("Cubes:", cubes)
```

13 . Write a program to print list after removing even numbers.

```
li= [1, 2, 3, 4, 5, 6, 7, 8, 9]
new_li = []

for i in li:
    if i % 2 != 0:
        new_li.append(i)

print ("List after removing even numbers:", new_li)
```

