

1. Python program to find smallest number in a list

```
In [1]: list1 = [10, 20, 4, 45, 99]

list1.sort()

print("Smallest element is:", *list1[:1])

Smallest element is: 4
```

2. Python program to find largest number in a list

```
In [2]: list1 = [10, 20, 4, 45, 99]

list1.sort()

print("Largest element is:", list1[-1])

Largest element is: 99
```

3. Python program to find second largest number in a list

```
In [3]: list1 = [10, 20, 4, 45, 99]

mx=max(list1[0],list1[1])
secondmax=min(list1[0],list1[1])
n =len(list1)
for i in range(2,n):
    if list1[i]>mx:
        secondmax=mx
        mx=list1[i]
    elif list1[i]>secondmax and \
        mx != list1[i]:
        secondmax=list1[i]

print("Second highest number is : ",\
      str(secondmax))

Second highest number is : 45
```

4. Python program to find N largest elements from a list

```
In [4]: def Nmaxelements(list1, N):
        final_list = []

        for i in range(0, N):
            max1 = 0

            for j in range(len(list1)):
                if list1[j] > max1:
                    max1 = list1[j];

            list1.remove(max1);
            final_list.append(max1)

        print(final_list)

list1 = [2, 6, 41, 85, 0, 3, 7, 6, 10]
N = 2

Nmaxelements(list1, N)

[85, 41]
```

5. Python program to print even numbers in a list

```
In [5]: list1 = [10, 21, 4, 45, 66, 93]

for num in list1:

    if num % 2 == 0:
        print(num, end=" ")

10 4 66
```

6. Python program to print odd numbers in a List

```
In [6]: list1 = [10, 21, 4, 45, 66, 93]

for num in list1:

    if num % 2 != 0:
        print(num, end = " ")

21 45 93
```

7. Python program to print all even numbers in a range

```
In [7]: start = int(input("Enter the start of range: "))
end = int(input("Enter the end of range: "))

for num in range(start, end + 1):

    # checking condition
    if num % 2 == 0:
        print(num, end = " ")

Enter the start of range: 10
Enter the end of range: 20
10 12 14 16 18 20
```

8. Python program to print all odd numbers in a range

```
In [8]: start, end = 4, 19

for num in range(start, end + 1):

    if num % 2 != 0:
        print(num, end = " ")

5 7 9 11 13 15 17 19
```

9. Python program to print positive numbers in a list

```
In [9]: list1 = [11, -21, 0, 45, 66, -93]

for num in list1:

    if num >= 0:
        print(num, end = " ")

11 0 45 66
```

10. Python program to print negative numbers in a list

```
In [10]: list1 = [11, -21, 0, 45, 66, -93]

for num in list1:

    if num < 0:
        print(num, end = " ")

-21 -93
```

11. Python program to print all positive numbers in a range

```
In [11]: start, end = -4, 19

for num in range(start, end + 1):

    if num >= 0:
        print(num, end = " ")

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
```

```
In [ ]:
```