

Q1. Write a Python program to find the second largest number in a list

```
def secmaxi(var):  
    maxi=0  
    secmaxi=0  
  
    for x in var:  
        if(x>maxi):  
            secmaxi=maxi  
            maxi=x  
        elif (x > secmaxi and x!=maxi):  
            secmaxi=x  
  
    return secmaxi
```

```
mylist = [10, 15, 2]  
print("Second Largest:", secmaxi(mylist))
```

Second Largest: 10

```
mylist = [0,5,5,7,9,4,1,2]  
print("Second Largest:", secmaxi(mylist))
```

Second Largest: 7

Q2. Write a Python program to print duplicates from a list of integers

```
mylist = [40, 50, -20, 60, 60, -20, -20]  
duplicate = []  
a = []
```

```
for x in mylist:  
    if x in a and x not in duplicate:  
        duplicate.append(x)  
    else:  
        a.append(x)
```

```
print(duplicate)
```

[60, -20]

```
mylist = [-7,-1,-7,1,8,8]  
duplicate = []  
a = []
```

```
for x in mylist:  
    if x in a and x not in duplicate:  
        duplicate.append(x)  
    else:  
        a.append(x)
```

```
print(duplicate)
```

```
[-7, 8]
```

Q3. Write a Python function which takes a list as an argument and find Cumulative sum of a list
#Cumulative sums, or running totals, are used to display the total sum of data as it grows with time

```
num = [10, 20, 30, 40, 50]
```

```
sum = []
```

```
total = 0
```

```
for x in num:
```

```
    total += x
```

```
    sum.append(total)
```

```
print(sum)
```

```
[10, 30, 60, 100, 150]
```