

```
# Find second largest with two numbers
mylist = [10,20,4,20,40,8]
max = 0
second_max = 0
for i in mylist:
    if(i>max):
        if(i>second_max):
            second_max = max
            max = i
        elif(i>second_max and i!=max):
            second_max = i
print(second_max)
```

↩ 20


```
# Valid Parenthesis
list1=[]
x=0
for i in "[{}]":
    if i in "[{(":
        list1.append(i)
    else:
        if(i=="}" and list1.pop()!="{"):
            break
        x+=1
        elif(i==")" and list1.pop()!="("):
            break
        x+=1
        elif(i=="]" and list1.pop()!="["):
            break
        x+=1
if(x==1):
    print("Not a valid parenthesis")
else:
    print("valid parenthesis")
```

↩ valid parenthesis

```
#nested list
mylist=[10,20,[30,40]]
mylist[-1][0]
```


↩ 30

```
# pascal list
mylist = [[1]]
n=5
for i in range(0,n-1):
    temp=[0]+mylist[-1]+[0]
    list1 = []
    # [0,10] , mylist=1
    for j in range(len(mylist)+1):
        list1.append(temp[j]+temp[j+1])
    mylist.append(list1)
print(mylist)
```

 `[[1], [1, 1], [1, 2, 1], [1, 3, 3, 1], [1, 4, 6, 4, 1]]`

```
# pascal triangle
mylist = []
for i in range(0, 5):
    temp = []
    for j in range(0, i + 1):
        if j == 0 or j == i:
            temp.append(1)
        else:
            temp.append(mylist[i - 1][j - 1] + mylist[i - 1][j])
    mylist.append(temp)

for row in mylist:
    print(row)
```

 `[1]`
`[1, 1]`
`[1, 2, 1]`
`[1, 3, 3, 1]`
`[1, 4, 6, 4, 1]`[+ Code](#)[+ Text](#)