

```
In [2]: 1  ## Function to find Second Largest number in a List
        2
        3  def secondlargest(li):
        4      unique = []
        5      for n in li:
        6          if n not in unique:
        7              unique.append(n)
        8      unique = sorted(unique,reverse=True)
        9      return unique[1]
       10  secondlargest([7,8,9])
       11
```

Out[2]: 8

```
In [6]: 1  ## Function to find Fifth Largest number in a List
        2
        3  def Fifthlargest(li):
        4      unique = []
        5      for n in li:
        6          if n not in unique:
        7              unique.append(n)
        8      unique = sorted(unique,reverse=True)
        9      return unique[5]
       10  Fifthlargest([1,2,2,3,4,5,6,7])
       11
```

Out[6]: 2

```
In [7]: 1  ## Function to find Klargest number in a List
        2
        3  def Klargest(li):
        4      unique = []
        5      for n in li:
        6          if n not in unique:
        7              unique.append(n)
        8      unique = sorted(unique,reverse=True)
        9      if len(unique)>k:
       10          return unique[k-1]
       11      else:
       12          return -1
       13  k=int(input())
       14  Klargest([1,2,3,4,5,6,7,8])
       15
```

4

Out[7]: 5

```
In [8]: 1  ## Function to find Ksmallest number in a List
2
3  def ksmallest(li):
4      unique = []
5      for n in li:
6          if n not in unique:
7              unique.append(n)
8      unique = sorted(unique)
9      if len(unique)>k:
10         return unique[k-1]
11     else:
12         return -1
13 k=int(input())
14 ksmallest([1,2,3,4,5,6,7,8])
15
```

3

Out[8]: 3

```
In [14]: 1  ##### Write a function to identify the elemen
2
3  def Highestfreq(li):
4      unique = {}
5      for n in li:
6          if n in unique.keys():
7              unique[n] +=1
8          else:
9              unique[n] = 1
10     freq=unique.values()
11     maxfreq = max(freq)
12     maxfreqE=[]
13     for item in unique.items():
14         if item[1]==maxfreq:
15             maxfreqE.append(item[0])
16     return min(maxfreqE)
17 Highestfreq([1,2,3,1,1,2])
```

Out[14]: 1

```
In [18]: 1 def SecondHighestFreq(li):
2         unique = {}
3         for n in li:
4             if n in unique.keys():
5                 unique[n] +=1
6             else:
7                 unique[n] = 1
8         print(unique)
9         un=sorted(unique.values())
10        print(un)
11        unique2=[]
12        for n in un:
13            if n not in unique2:
14                unique2.append(n)
15        uv=unique2[-k]
16        maxkeys=[]
17        for item in unique.items():
18            if item[1]==uv:
19                maxkeys.append(item[0])
20        return max(maxkeys)
21        k=int(input())
22        SecondHighestFreq([1,2,3,2,1,4,4,9])
23
```

```
2
{1: 2, 2: 2, 3: 1, 4: 2, 9: 1}
[1, 1, 2, 2, 2]
```

Out[18]: 9

```
In [21]: 1 def KHighestFreq(li,k):
2         unique = {}
3         for n in li:
4             if n in unique.keys():
5                 unique[n] +=1
6             else:
7                 unique[n] = 1
8         uniquefreq=[]
9         for value in unique.values():
10            if value not in uniquefreq:
11                uniquefreq.append(value)
12
13        uniquefreq=sorted(uniquefreq,reverse=True)
14        kfreq=uniquefreq[k-1]
15        kfreqchar=[]
16        for key in unique.items():
17            if key[1]==kfreq:
18                kfreqchar.append(key[0])
19        return kfreqchar
20        KHighestFreq([9,8,7,6,5,2,3,4,9,6,7,7,6,7,6],3)
```

Out[21]: [8, 5, 2, 3, 4]

In []:

1

