

Nidhi is trying to solve a few questions in mathematics. She is actually finding out the central tendency(mean, median, and mode) of some numbers. It is taking a lot of time for her to complete the questions. Help Nidhi in solving the following questions. Write the program for each of them. • • She wants to find the mean of numbers. Write a program to find the mean of numbers. • Hint: find the sum of all the numbers in the list then divide it with the number of elements present in the list.

```
list_input = [1,2,3,4,5,4,5,6]
s = 0
for i in list_input:
    s += i
print(s)
print("The mean is:",s//len(list_input))

c = 0
dic = {}
for i in list_input:
    if i in dic:
        dic[i] += 1
    else:
        dic[i] = 1
x = 0
for i in dic.values():
    if i > x:
        x = i
modes = []
for i,j in dic.items():
    if j == x:
        modes.append(i)
print("The mode values is:",modes)
sorted_input = sorted(list_input)
n = len(sorted_input)
if n % 2 != 0:
    median = sorted_input[n // 2]
else:
    median = (sorted_input[n // 2 - 1] + sorted_input[n // 2]) / 2
print("The median is:", median)
```

```
30
The mean is: 3
The mode values is: [4, 5]
The median is: 4.0
```

A teacher created a list of names of the students. Now teachers want to get the name of all those students whose name starts with the letter "A". To help the teacher write a python program and create a list of names of students. Then print the names which start with the letter "A". (Hint: Use for loop and give condition I [0] == "A")

```
y = ['Abi', 'Akkash', 'Ramya', 'Priya', 'Amar']
x = []
for i in y:
    if i[0] == "A":
        x.append(i)
print(x)
```

```
['Abi', 'Akkash', 'Amar']
```

