

Activities Nov 9 16:25

Open *a2.py Save

```
1 # Function for average score of the class
2
3 def average(listofmarks):
4     sum=0
5     count=0
6     for i in range(len(listofmarks)):
7         if listofmarks[i]!=-999:
8             sum+=listofmarks[i]
9             count+=1
10    avg=sum/count
11    print("Total Marks : ", sum)
12    print("Average Marks : {:.2f}".format(avg))
13
14 # Function for Highest score in the test for the class
15
16 def Maximum(listofmarks):
17     for i in range(len(listofmarks)):
18         if listofmarks[i]!=-999:
19             Max=listofmarks[0]
20             break
21     for i in range(1,len(listofmarks)):
22         if listofmarks[i]>Max:
23             Max=listofmarks[i]
24     return(Max)
25
26
27 # Function for Lowest score in the test for the class
28
29 def Minimum(listofmarks):
30     for i in range(len(listofmarks)):
31         if listofmarks[i]!=-999:
32             Min=listofmarks[0]
33             break
34     for i in range(1,len(listofmarks)):
35         if listofmarks[i]<Min:
36             Min=listofmarks[i]
37     return(Min)
38
39 #<
```

Python 2 Tab Width: 8 Ln 26, Col 1 INS

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Open *a2.py Save

```
40 # Function for counting the number of students absent for the test
41
42 def absentcount(listofmarks):
43     count=0
44     for i in range(len(listofmarks)):
45         if listofmarks[i]==-999:
46             count+=1
47     return(count)
48
49
50 # Function for displaying marks with highest frequency
51 def maxFrequency(listofmarks):
52     i=0
53     Max=0
54     print("Marks | Frequency")
55     for j in listofmarks:
56         if (listofmarks.index(j)==i):
57             print(j," | ",listofmarks.count(j))
58             if listofmarks.count(j)>Max:
59                 Max=listofmarks.count(j)
60                 mark=j
61         i=i+1
62     return(mark,Max)
63
64
65 # Main function
66
67 marksinFDS=[]
68 numberofstudents=int(input("Enter total number of students : "))
69 for i in range(numberofstudents):
70     marks=int(input("Enter marks of student "+str(i+1)+" : "))
71     marksinFDS.append(marks)
72
73 flag=1
74 while flag==1:
75     print("\n\n-----MENU-----\n")
76     print("1. Total and Average Marks of the Class")
77     print("2. Highest and Lowest Marks in the Class")
78     print("3. Number of Students absent for the test")
```

Python 2 Tab Width: 8 Ln 78, Col 1 INS

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Open ~ a2.py Save

```
78 print("3. Number of Students absent for the test")
79 print("4. Marks with Highest Frequency")
80 print("5. Exit\n")
81 ch=int(input("Enter your Choice (from 1 to 5) :"))
82
83 if ch==1:
84     average(marksinFDS)
85     a = input("Do you want to continue (yes/no) :")
86     if a == "yes":
87         flag = 1
88     else:
89         flag = 0
90     print("Thanks for using this program!")
91
92 elif ch==2:
93     print("Highest Score in Class : ", Maximum(marksinFDS))
94     print("Lowest Score in Class : ", Minimum(marksinFDS))
95     a = input("Do you want to continue (yes/no) :")
96     if a == "yes":
97         flag = 1
98     else:
99         flag = 0
100    print("Thanks for using this program!")
101
102 elif ch==3:
103    print("Number of Students absent in the test : ", absentcount(marksinFDS))
104    a = input("Do you want to continue (yes/no) :")
105    if a == "yes":
106        flag = 1
107    else:
108        flag = 0
109    print("Thanks for using this program!")
110
111 elif ch==4:
112    mark,fr = maxFrequency(marksinFDS)
113    print("Highest frequency is of marks {0} that is {1} ".format(mark,fr))
114    a = input("Do you want to continue (yes/no) :")
115    if a == "yes":
116        flag = 1
```

Python 2 Tab Width: 8 Ln 116, Col 1 INS

```
117     else:
118         flag = 0
119         print("Thanks for using this program!")
120
121 elif ch==5:
122     flag=0
123     print("Thanks for using this program!")
124
125 else:
126     print("!!Wrong Choice!! ")
127     a=input("Do you want to continue (yes/no) :")
128     if a=="yes":
129         flag=1
130     else:
131         flag=0
132     print("Thanks for using this program!")
```

Python 2 Tab Width: 8 Ln 132, Col 52 INS

```
Activities Nov 9 16:21 onkar@ubuntu: ~
onkar@ubuntu:~$ python3 a2.py
Enter total number of students : 10
Enter marks of student 1 : 97
Enter marks of student 2 : 98
Enter marks of student 3 : 78
Enter marks of student 4 : 86
Enter marks of student 5 : 85
Enter marks of student 6 : 76
Enter marks of student 7 : 79
Enter marks of student 8 : 95
Enter marks of student 9 : 92
Enter marks of student 10 : 94

-----MENU-----
1. Total and Average Marks of the Class
2. Highest and Lowest Marks in the Class
3. Number of Students absent for the test
4. Marks with Highest Frequency
5. Exit

Enter your Choice (from 1 to 5) :1
Total Marks : 880
Average Marks : 88.00
Do you want to continue (yes/no) :yes

-----MENU-----
1. Total and Average Marks of the Class
2. Highest and Lowest Marks in the Class
3. Number of Students absent for the test
4. Marks with Highest Frequency
5. Exit

Enter your Choice (from 1 to 5) :2
Highest Score in Class : 98
Lowest Score in Class : 76
Do you want to continue (yes/no) :yes
```

```
Activities Nov 9 16:24 onkar@ubuntu: ~
Lowest Score in Class : 76
Do you want to continue (yes/no) :yes

-----MENU-----
1. Total and Average Marks of the Class
2. Highest and Lowest Marks in the Class
3. Number of Students absent for the test
4. Marks with Highest Frequency
5. Exit

Enter your Choice (from 1 to 5) :3
Number of Students absent in the test : 0
Do you want to continue (yes/no) :yes

-----MENU-----
1. Total and Average Marks of the Class
2. Highest and Lowest Marks in the Class
3. Number of Students absent for the test
4. Marks with Highest Frequency
5. Exit

Enter your Choice (from 1 to 5) :4
Marks | Frequency
97 | 1
98 | 1
78 | 1
86 | 1
85 | 1
76 | 1
79 | 1
95 | 1
92 | 1
94 | 1
Highest frequency is of marks 97 that is 1
Do you want to continue (yes/no) :yes
```



-----MENU-----

1. Total and Average Marks of the Class
2. Highest and Lowest Marks in the Class
3. Number of Students absent for the test
4. Marks with Highest Frequency
5. Exit

Enter your Choice (from 1 to 5) :5
Thanks for using this program!

onkar@ubuntu:~\$