

```

student_marks=[[ 'name', ['A', 'B', 'C', 'D', 'E']],
                ['Ankit', [41, 34, 45, 55, 63]],
                ['Aravind', [42, 23, 34, 44, 53]],
                ['Lakshay', [32, 23, 13, 54, 67]],
                ['Pranav', [21, 23, 25, 56, 56]],
                ['Gyan', [23, 82, 23, 63, 34]],
                ]
print(student_marks)

[['name', ['A', 'B', 'C', 'D', 'E']], ['Ankit', [41, 34, 45, 55, 63]],
 ['Aravind', [42, 23, 34, 44, 53]], ['Lakshay', [32, 23, 13, 54, 67]],
 ['Pranav', [21, 23, 25, 56, 56]], ['Gyan', [23, 82, 23, 63, 34]]]

#who scored the highest mark in subje t B

student_with_marks_in_B = []

for student in student_marks[1:]:
    name=student[0]
    marks_in_B=student[1][1]

    student_with_marks_in_B.append([marks_in_B,name])

student_with_marks_in_B

[[34, 'Ankit'], [23, 'Aravind'], [23, 'Lakshay'], [23, 'Pranav'], [82,
'Gyan']]

sorted(student_with_marks_in_B)

[[23, 'Aravind'], [23, 'Lakshay'], [23, 'Pranav'], [34, 'Ankit'], [82,
'Gyan']]

sorted(student_with_marks_in_B)[-1][1]

'Gyan'

#Avg mark in subject c

student_avg_marks_in_C = []

for student in student_marks[2:]:
    name=student[0]
    marks_in_C=student[1][1]

    student_avg_marks_in_C.append([marks_in_C,name])

student_avg_marks_in_C

[[23, 'Aravind'], [23, 'Lakshay'], [23, 'Pranav'], [82, 'Gyan']]

sorted(student_avg_marks_in_C)

```

```
[[23, 'Aravind'], [23, 'Lakshay'], [23, 'Pranav'], [82, 'Gyan']]
```

```
x=0
for i in student_avg_marks_in_C:
    x+= i[0]
y=x/len(student_avg_marks_in_C)
print(y)
```

37.75

*#who scored the highest percentage of marks*

```
for in_C in student_marks[1:] :

    marks = in_C[1][2]
    print(marks)
```

45  
34  
13  
25  
23

```
marks_in_C = []
```

```
for in_C in student_marks[1:] :

    marks = in_C[1][2]
    marks_in_C.append(marks)
```

```
average_marks = sum(marks_in_C)/len(marks_in_C)
print('Average Marks scored in subject C:', average_marks)
```

Average Marks scored in subject C: 28.0

*#If considered only top-4 subjects of a candidate, then who scored the highest percentage of marks*

```
for marks in student_marks[1:]:
    name = marks[0]
    in_all_5 = sorted(marks[1])

    print(name,in_all_5)
```

Ankit [34, 41, 45, 55, 63]  
Aravind [23, 34, 42, 44, 53]  
Lakshay [13, 23, 32, 54, 67]  
Pranav [21, 23, 25, 56, 56]  
Gyan [23, 23, 34, 63, 82]

```
for marks in student_marks[1:]:
    name = marks[0]
```

```

    in_top_4 = sorted(marks[1])[1:]

    print(name,in_top_4)
Ankit [41, 45, 55, 63]
Aravind [34, 42, 44, 53]
Lakshay [23, 32, 54, 67]
Pranav [23, 25, 56, 56]
Gyan [23, 34, 63, 82]

for marks in student_marks[1:]:
    name = marks[0]
    in_top_4 = sorted(marks[1])[1:]
    total = sum(in_top_4)

    percentage = (total*100)/400

    print(name, percentage)
Ankit 51.0
Aravind 43.25
Lakshay 44.0
Pranav 40.0
Gyan 50.5

percentage_in_top4 = []

for marks in student_marks[1:]:
    name = marks[0]
    in_top_4 = sorted(marks[1])[1:]
    total = sum(in_top_4)

    percentage = (total*100)/400

    percentage_in_top4.append([percentage,name])

sorted(permission_in_top4)

[[40.0, 'Pranav'],
 [43.25, 'Aravind'],
 [44.0, 'Lakshay'],
 [50.5, 'Gyan'],
 [51.0, 'Ankit']]

sorted(permission_in_top4)[-1][1]

'Ankit'

```