

5.1.2 Student grade based on aggregate

Algorithm: Find Total, Percentage and Grade

Step 1: Start

Step 2: Input marks of 4 subjects

Step 3: Calculate total

- total = sum of all marks

Step 4: Calculate percentage

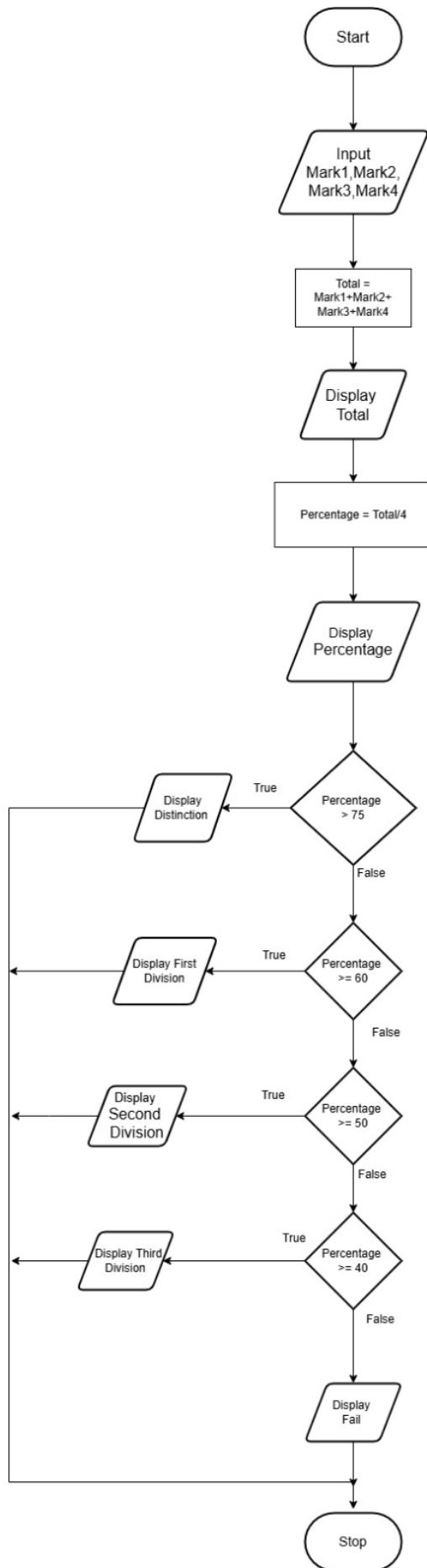
- percentage = $(\text{total} / 400) \times 100$

Step 5: Decide grade

- If percentage > 75 → Grade = Distinction
- Else if percentage ≥ 60 → Grade = First Division
- Else if percentage ≥ 50 → Grade = Second Division
- Else if percentage ≥ 40 → Grade = Third Division
- Else → Grade = Fail

Step 6: Print total, percentage, and grade

Step 7: Stop



5.1.2. Student Grade Based on Aggregate

Write a program to calculate the total marks, aggregate percentage, and grade of a student based on marks in four subjects. The grade is determined as follows:

- Aggregate > 75%: Distinction
- Aggregate >= 60% and < 75%: First Division
- Aggregate >= 50% and < 60%: Second Division
- Aggregate >= 40% and < 50%: Third Division
- Aggregate < 40%: Fail

Input Format:

- Four space-separated integers representing the marks in four subjects.

Output Format:

- The first line should print the total marks.
- The second line should print the aggregate percentage with two decimal places.
- The third line should print the grade.

Constraints:

- $0 \leq \text{marks} \leq 100$

```

studentG...
1   marks = list(map(int, input().split()))
2
3   total = sum(marks)
4   aggregate = (total / 400) * 100
5
6   if aggregate > 75:
7       grade = "Distinction"
8   elif aggregate >= 60:
9       grade = "First Division"
10  elif aggregate >= 50:
11      grade = "Second Division"
12  elif aggregate >= 40:
13      grade = "Third Division"
14  else:
15      grade = "Fail"
16
17  print(total)

```

The code defines a function named `studentG...` which takes input from the user using `input()`, splits it into a list of integers using `map(int, ...)`, and stores it in the variable `marks`. It then calculates the total marks using `sum(marks)` and the aggregate percentage using `(total / 400) * 100`. The aggregate percentage is stored in the variable `aggregate`. The code uses nested conditional statements (`if`, `elif`) to determine the grade based on the aggregate percentage. Finally, it prints the total marks using `print(total)`.

Average time
0.007 s
7.00 ms

Maximum time
0.018 s
18.00 ms

5 out of 5 shown test case(s) passed

Test case 1 **18 ms**

Expected output

Actual output
85 90 78 88
341

Distinction
Distinction

+

Sample Test Cases

v

Test case 2 **6 ms**

Terminal

Test cases

v

Submit
< Prev
Reset
Next >

