

Experiment

5

5.1.2 Student Grade Based on Aggregate

Algorithm

:

Step 1 : Start

Step 2 : Input m₁, m₂, m₃, m₄

Step 3 : Calculate

$$\text{total} = m_1 + m_2 + m_3 + m_4$$

Step 4 : Print total

Step 5 : Calculate

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

Step 6 : Print percentage

Step 7 : if (percentage > 75)

 Print Distinction

 else if (percentage >= 60 & percentage < 75)

 Print First Division

 else if (percentage >= 50 & percentage < 60)

 Print Second Division

 else if (percentage >= 40 & percentage < 50)

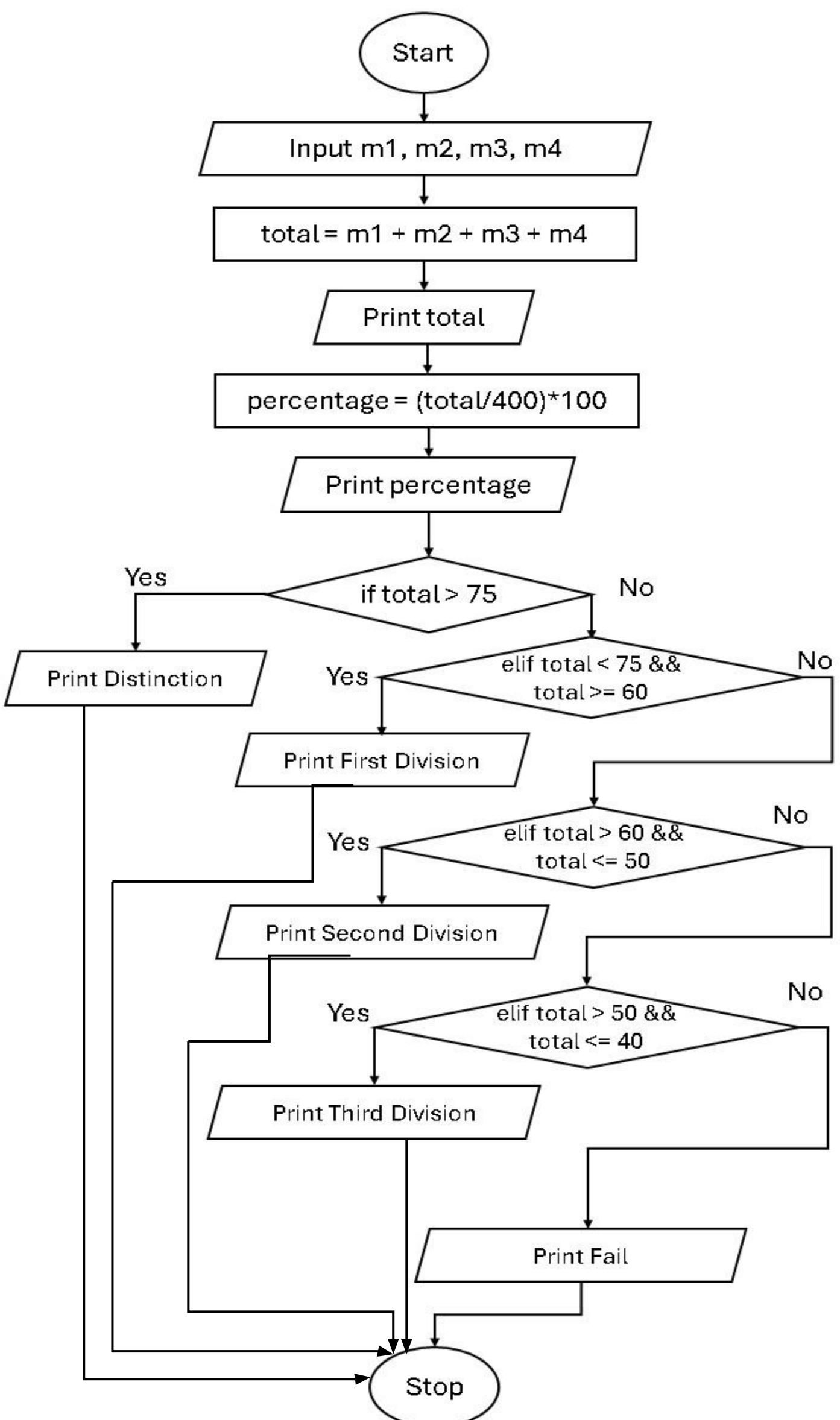
 Print Third Division

 else

 Print Fail

Step 8 : Stop

Flowchart



Code :

```
m1,m2,m3,m4 = map(int,input().split())
total = m1+m2+m3+m4
print(total)
percentage = (total/400)*100
print(f'{percentage:.2f}')
if(percentage > 75):
    print("Distinction")
elif (percentage >= 60 and percentage <75):
    print("First Division")
elif (percentage >= 50 and percentage < 60):
    print("Second Division")
elif (percentage >= 40 and percentage < 50):
    print("Third Division")
else:
    print("Fail")
```

Execution :

5.1.2. Student Grade Based on Aggregate

01:53 A ⚡ ⏴ -

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:

- $0 <= \text{marks} \text{ in each subject} <= 100$

Sample Test Cases

+

```
studentG...
1 marks = list(map(int, input().split()))
2 total = sum(marks)
3 aggregate = (total / 400) * 100
4 print(total)
5 print(f'{aggregate:.2f}')
6
7
8
9 if aggregate >= 75:
10     print("Distinction")
```

Average time Maximum time
0.004 s 0.005 s
3.60 ms 5.00 ms

5 out of 5 shown test case(s) passed
5 out of 5 hidden test case(s) passed

Test case 1 5 ms
Expected output
85 90 78 88
Actual output
85 90 78 88
341
85.25
Distinction

Test case 2 3 ms
Distinction