

## 5.1.2 Calculate Total, Average and Division

### A) Algorithm

Step 1: Start  
Step 2: Input the marks of students separated by space and store them in list marks  
Step 3: Calculate the total marks using  
total = sum(marks)  
Step 4: Calculate the average marks using  
average = total / len(marks)  
Step 5: Print the total marks  
Step 6: Print the average marks up to 2 decimal places  
Step 7: Check the average marks  

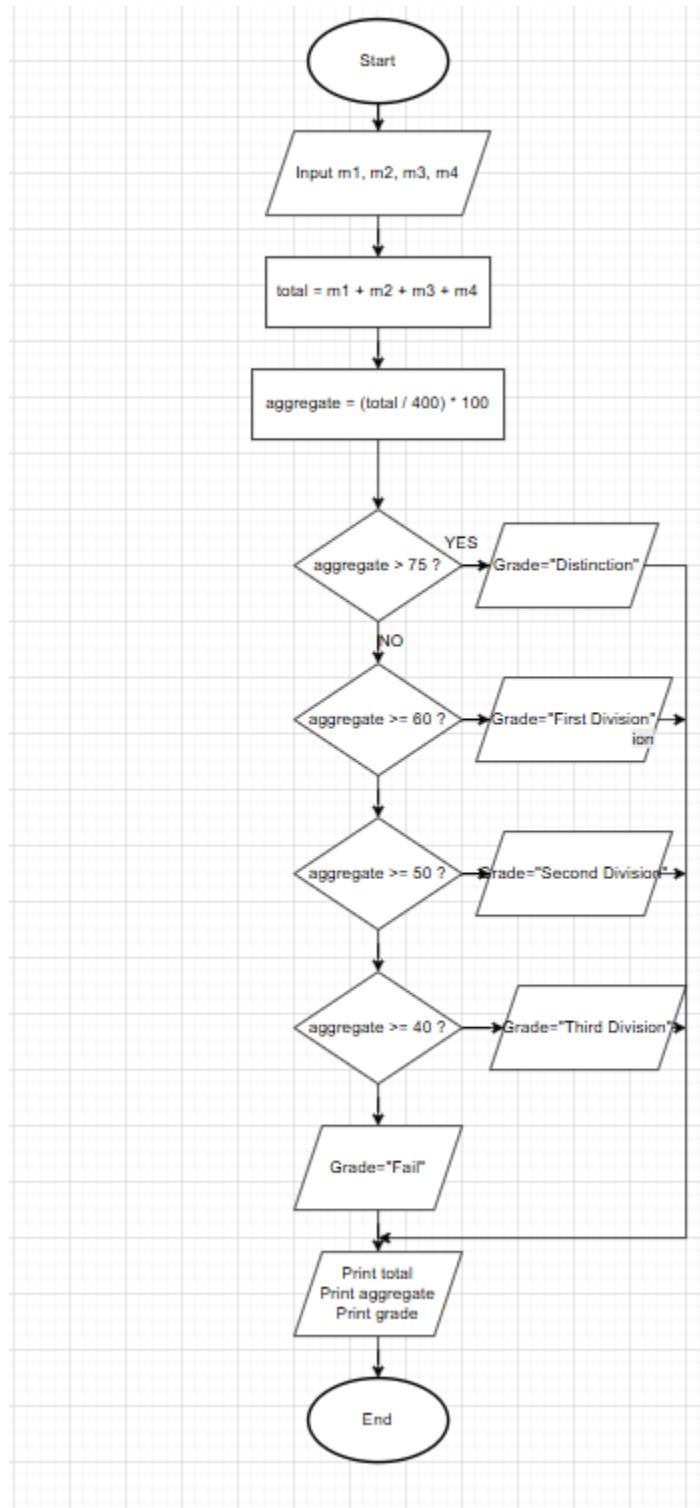
- If average  $\geq$  75, print "Distinction"
- Else if average  $\geq$  60, print "First Division"
- Else if average  $\geq$  50, print "Second Division"
- Else if average  $\geq$  40, print "Third Division"
- Else print "Fail"

  
Step 8: Stop

### B) Code

```
marks=list(map(int, input().split()))
total = sum(marks)
average = total/len(marks)
print(total)
print(f"{average:.2f}")
if average >=75:
    print("Distinction")
elif average >= 60:
    print("First Division")
elif average >= 50:
    print("Second Division")
elif average >= 40:
    print("Third Division")
else:
    print("Fail")
```

### C) Flowchart



## D) output

The screenshot shows a programming interface on a web browser. At the top, there's a header with the logo 'CODETANTRA' and a link to 'Home'. On the right side of the header, there are links for 'shreyash.girade.batch2025@sitnagpur.siu.edu.in', 'Support', and 'Logout'. Below the header, there's a title '5.1.2. Student Grade Based on Aggregate' and a timestamp '08:05'. The main content area contains several sections:

- Description:** A text box containing instructions: "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:" followed by a bulleted list of grade criteria.
- Input Format:** A list of requirements: "Four space-separated integers representing the marks in four subjects."
- Output Format:** Requirements: "The first line should print the total marks. The second line should print the aggregate percentage with two
- Code Editor:** A code editor window titled 'studentG...' showing Python code. The code calculates the average from a list of marks and prints it with two decimal places. It then uses an if-elif-else structure to determine and print the grade based on the average.
- Terminal:** A small terminal window below the code editor.
- Test Cases:** A section labeled 'Sample Test Cases' with a '+' button to add more.
- Buttons:** At the bottom right, there are buttons for 'Prev', 'Reset', 'Submit' (highlighted in green), and 'Next >'.