

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

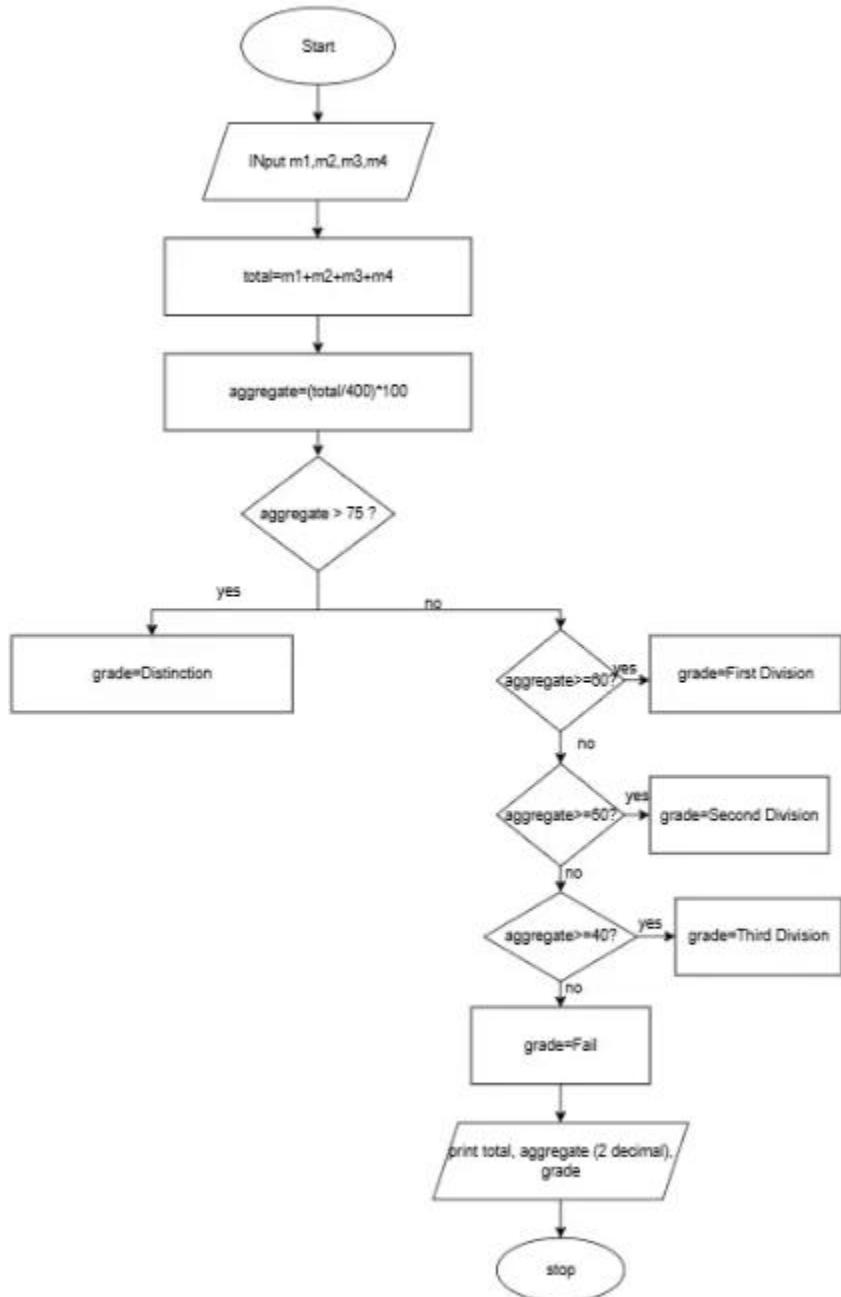
- If average \geq 85, print "Distinction"
- Else if average \geq 60, print "First Division"
- Else if average \geq 50, print "Second Division"
- Else if average \geq 40, print "Third Division"
- Else print "Fail"

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 >=85:
    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 the CodeTANTRA IDE interface. The title bar says "CODETANTRA Home". The main area has a problem statement: "5.1.2. Student Grade Based on Aggregate". It asks to write a program to calculate total marks, aggregate percentage, and grade for four subjects. The grade is determined by the following rules:

- 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 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 code editor contains the following Python script:

```
marks=list(map(int, input().split()))
total = sum(marks)
average = total/len(marks)
print(total)
print(f"average:{.2f}")
if average >=85:
    print("Distinction")
elif average >= 60:
    print("First Division")
elif average >= 50:
    print("Second Division")
elif average >= 40:
    print("Third Division")
else:
    print("Fail")
```

Below the code editor are buttons for "Terminal", "Test cases", "Submit", and "Next >".