

## 5.1.2 Student Grade Based on Aggregate:

Algorithm:

Step 1: Start

Step 2: Input Mark 1, Mark 2, Mark 3, Mark 4

Step 3: Total = Mark1 + Mark 2 + Mark 3 + Mark 4 + Mark 5

Step 4: Display Total

Step 5: Percentage = Total / 4

Step 6: Display Percentage

Step 7: if Percentage  $\geq 75$ , then

Display Distinction

Step 8: Else if Percentage  $\geq 60$ , then

Display First Division

Step 9: Else if Percentage  $\geq 50$ , then

Display Second Division

Step 10: Else if Percentage  $\geq 40$ , then

Display Third Division

Step 11: Else Display Fail

Step 12: Stop

The screenshot shows a C++ IDE with a program titled "5.1.2 Student Grade Based on Aggregate". The program code is as follows:

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

The IDE also shows the program's output and test cases. The output is:

```
85.50
85.50
Fail
```

The test cases section shows that 5 out of 5 hidden test cases passed.

Flowchart:

