

MEMBER 4 – MARKS & RESULT CALCULATION (JAVA DEVELOPMENT)

Name: K.Tarun

What this member actually does

Member 4 is the person who **decides student results**.

They write Java code that:

- Takes marks
- Calculates totals
- Decides pass or fail
- Assigns grades
- Generates semester results

In short: **this member controls how results are produced.**

1. Handling Marks Data

This member creates a Java class called Marks.

What it stores:

- Student roll number
- Subject code
- Internal marks
- External marks

This ensures marks for every student and subject are stored properly.

2. Entering Marks

This member writes Java logic to:

- Enter internal marks (mid exams, assignments)
- Enter external marks (final exam)
- Check if entered marks are valid (not negative, not above max)

This prevents wrong marks from entering the system.

3. Calculating Total Marks

Using the entered marks, the system:

- Adds internal + external marks
- Calculates total marks automatically

This removes manual calculation errors.

4. Pass or Fail Decision

This member writes logic to:

- Check if student meets minimum required marks
- Decide whether the student **passed or failed** in each subject

This decision is fully automated and rule-based.

5. Assigning Grades

This member creates a GradeCalculator class to:

- Convert total marks into grades (A, B, C, etc.)
- Ensure grading follows predefined rules

This gives clear academic evaluation instead of only numbers.

6. Generating Semester Results

Finally, this member generates:

- Subject-wise marks
- Grades
- Pass/Fail status
- Overall semester result

This produces the **final academic report** for students