

# School Results Application

## Class Diagram :-

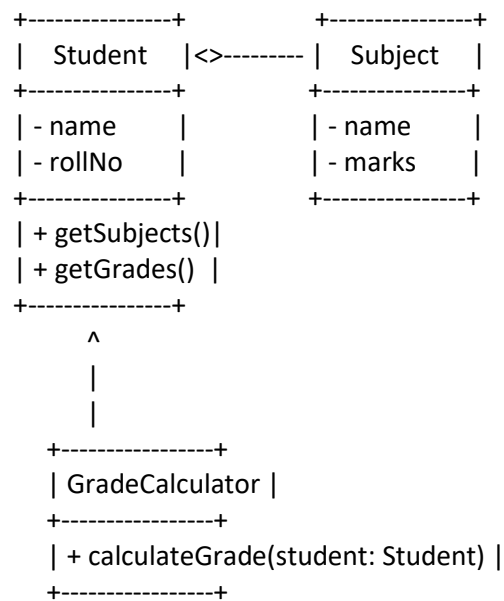
Classes and Relationships:

- Student
  - Attributes: name, rollNo
  - Methods: getSubjects(), getGrades()
- Subject
  - Attributes: name, marks
- GradeCalculator
  - Methods: calculateGrade(Student student)

Relationships:

- A Student aggregates multiple Subject objects → Aggregation (hollow diamond).
- GradeCalculator uses Student (dependency).

### UML Representation:

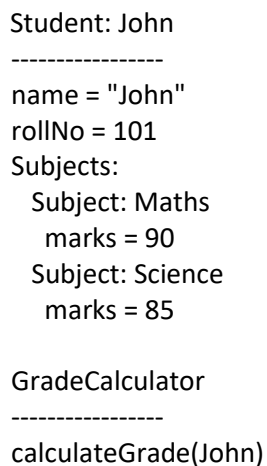


## Object Diagram :-

Example Scenario:

- Student: John
- Subjects: Maths (90), Science (85)
- GradeCalculator computes result.

### UML Representation:



## Sequence Diagram :-

Scenario: Student requests grade.

- Actors: Student, GradeCalculator
- Flow:
  1. Student → GradeCalculator: `requestGrade()`
  2. GradeCalculator → Student: `getSubjects()`
  3. GradeCalculator calculates grade
  4. GradeCalculator → Student: `returnGrade()`

## UML Representation:

