

# **Project README**

## **1. Project Overview**

This project is a simple Java console-based application that calculates the total marks, average percentage, and final grade of a student based on the marks entered for multiple subjects.

## **2. Features**

- Accepts user input for number of subjects.
- Accepts marks for each subject (out of 100).
- Validates marks to ensure they are between 0 and 100.
- Calculates total marks.
- Calculates average percentage.
- Assigns grade based on average percentage.
- Displays final result in a clear format.

## **3. Grading Criteria**

- 90% and above : Grade A
- 80% - 89% : Grade B
- 70% - 79% : Grade C
- 60% - 69% : Grade D
- 50% - 59% : Grade E
- Below 50% : Grade F

## **4. How It Works**

1. The program asks the user to enter the number of subjects.
2. It then prompts the user to enter marks for each subject.
3. If invalid marks (less than 0 or greater than 100) are entered, the program asks the user to re-enter the marks.
4. After collecting valid inputs, the program calculates:
  - Total Marks
  - Average Percentage

5. Based on the average percentage, a grade is assigned.
6. Finally, the result is displayed on the console.

## 5. How to Run the Program

1. Install Java (JDK 8 or above).
2. Save the file as StudentGradeCalculator.java.
3. Open terminal or command prompt.
4. Compile the program:  
`javac StudentGradeCalculator.java`
5. Run the program:  
`java StudentGradeCalculator`