

```
import java.util.Scanner;

public class StudentResultSystem {

    public static char calculateGrade(double percentage) {

        if (percentage >= 90) return 'A';

        else if (percentage >= 75) return 'B';

        else if (percentage >= 60) return 'C';

        else if (percentage >= 40) return 'D';

        else return 'F';

    }
```

```
    public static void gradeMessage(char grade) {

        switch (grade) {

            case 'A':

                System.out.println("Excellent Performance");

                break;

            case 'B':

                System.out.println("Very Good");

                break;

            case 'C':

                System.out.println("Good");

                break;

            case 'D':

                System.out.println("Pass");

                break;

            case 'F':

                System.out.println("Fail");

                break;

            default:

                System.out.println("Invalid Grade");

        }

    }
```

```
public static void main(String[] args) {

    Scanner sc = new Scanner(System.in);
    char choice;

    while (true) {

        int totalMarks = 0;
        boolean invalid = false;

        System.out.println("\nEnter marks for 5 subjects:");

        for (int i = 1; i <= 5; i++) {
            System.out.print("Subject " + i + ": ");
            int marks = sc.nextInt();

            if (marks < 0 || marks > 100) {
                System.out.println("Invalid marks! Enter between 0 and 100.");
                invalid = true;
                break; // stop subject entry
            }
            totalMarks += marks;
        }

        if (invalid) {
            continue;
        }

        double percentage = (totalMarks / 500.0) * 100;
        char grade = calculateGrade(percentage);
    }
}
```

```
System.out.println("\n--- Result Summary ---");

System.out.println("Total Marks: " + totalMarks);

System.out.println("Percentage: " + percentage + "%");

System.out.println("Grade: " + grade);

gradeMessage(grade);


System.out.print("\nDo you want to enter another student? (Y/N): ");

choice = sc.next().charAt(0);


if (choice == 'N' || choice == 'n') {
    break; // exit loop
}

}

sc.close();

System.out.println("Program Ended.");

}

}
```

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\OMSAI> cd Downloads
PS C:\Users\OMSAI\Downloads> javac StudentResultSystem.java
PS C:\Users\OMSAI\Downloads> java StudentResultSystem

Enter marks for 5 subjects:
Subject 1: 85
Subject 2: 78
Subject 3: 90
Subject 4: 88
Subject 5: 80

--- Result Summary ---
Total Marks: 421
Percentage: 84.2%
Grade: B
Very Good

Do you want to enter another student? (Y/N): N
Program Ended.
PS C:\Users\OMSAI\Downloads>
```