```java
import java.util.Scanner;

public class StudentResultSystem {
  public StudentResultSystem() {
  }

  public static char calculateGrade(double var0) {
    if (var0 >= 90.0) {
      return 'A';
    } else if (var0 >= 75.0) {
      return 'B';
    } else if (var0 >= 60.0) {
      return 'C';
    } else {
      return (char)(var0 >= 40.0 ? 'D' : 'F');
    }
  }

  public static void gradeMessage(char var0) {
    switch (var0) {
      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");
```

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        break;
      case 'E':
      default:
        System.out.println("Invalid Grade");
        break;
      case 'F':
        System.out.println("Fail");
    }

  }

  public static void main(String[] var0) {
    Scanner var1 = new Scanner(System.in);

    char var2;
    do {
      int var3;
      boolean var4;
      do {
        var3 = 0;
        var4 = false;
        System.out.println("\nEnter marks for 5 subjects:");

        for(int var5 = 1; var5 <= 5; ++var5) {
          System.out.print("Subject " + var5 + ": ");
          int var6 = var1.nextInt();
          if (var6 < 0 || var6 > 100) {
            System.out.println("Invalid marks! Enter between 0 and 100.");
            var4 = true;
            break;
          }
```

```java
            var3 += var6;

        }

    } while(var4);


    double var8 = (double)var3 / 500.0 * 100.0;

    char var7 = calculateGrade(var8);

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

    System.out.println("Total Marks: " + var3);

    System.out.println("Percentage: " + var8 + "%");

    System.out.println("Grade: " + var7);

    gradeMessage(var7);

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

    var2 = var1.next().charAt(0);

} while(var2 != 'N' && var2 != 'n');


var1.close();

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

    }

}
```

```
Active code page: 65001

C:\Users\madha\OneDrive\Desktop\sanika>javac studentresultsystem.java
Picked up JAVA_TOOL_OPTIONS: -Dstdout.encoding=UTF-8 -Dstderr.encoding=UTF-8
[0.085s][warning][cds] A jar file is not the one used while building the shared archive
file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pac
k-jdk\java\21\lib\modules
[0.086s][warning][cds] A jar file is not the one used while building the shared archive
file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pac
k-jdk\java\21\lib\modules
[0.088s][warning][cds] C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.j
ava-extension-pack-jdk\java\21\lib\modules timestamp has changed.

C:\Users\madha\OneDrive\Desktop\sanika>java StudentResultSystem
Picked up JAVA_TOOL_OPTIONS: -Dstdout.encoding=UTF-8 -Dstderr.encoding=UTF-8
[0.027s][warning][cds] A jar file is not the one used while building the shared archive
file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pac
k-jdk\java\21\lib\modules
[0.028s][warning][cds] A jar file is not the one used while building the shared archive
file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pac
k-jdk\java\21\lib\modules
[0.029s][warning][cds] C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.j
ava-extension-pack-jdk\java\21\lib\modules timestamp has changed.

Enter marks for 5 subjects:
Subject 1: 67
Subject 2: 57
Subject 3: 85
Subject 4: 55
Subject 5: 74

    Result Summary
```

```
Enter marks for 5 subjects:
Subject 1: 67
Subject 2: 57
Subject 3: 85
Subject 4: 55
Subject 5: 74

--- Result Summary ---
Total Marks: 338
Percentage: 67.60000000000001%
Grade: C
Good

Do you want to enter another student? (Y/N): sneha

Enter marks for 5 subjects:
Subject 1: 78
Subject 2: 96
Subject 3: 85
Subject 4: 76
Subject 5: 88

--- Result Summary ---
Total Marks: 423
Percentage: 84.6%
Grade: B
Very Good

Do you want to enter another student? (Y/N): vishal

Enter marks for 5 subjects:
Subject 1: 55
```

```
Do you want to enter another student? (Y/N): vishal

Enter marks for 5 subjects:
Subject 1: 55
Subject 2: 45
Subject 3: 34
Subject 4: 75
Subject 5: 66

--- Result Summary ---
Total Marks: 275
Percentage: 55.00000000000001%
Grade: D
Pass

Do you want to enter another student? (Y/N): rahul

Enter marks for 5 subjects:
Subject 1: 24
Subject 2: 35
Subject 3: 22
Subject 4: 21
Subject 5: 27

--- Result Summary ---
Total Marks: 129
Percentage: 25.8%
Grade: F
Fail

Do you want to enter another student? (Y/N):
```