

# **Program Specifications:**

**Program Name:** Grade Analyzer

**Description:** This program analyzes student grades and provides statistics.

## **Features:**

1. Uses a **for loop** to process multiple students
2. Uses **switch-case** to categorize grades
3. Takes user input for number of students and their grades
4. Calculates statistics and displays grade distribution

## **Expected Output Example:**

```
===== GRADE ANALYZER =====
```

```
Enter number of students: 5
```

```
Enter grade for student 1 (0-100): 85
```

```
Enter grade for student 2 (0-100): 92
```

```
Enter grade for student 3 (0-100): 67
```

```
Enter grade for student 4 (0-100): 45
```

```
Enter grade for student 5 (0-100): 78
```

```
===== GRADE REPORT =====
```

```
Student 1: 85 (B)
```

```
Student 2: 92 (A)
```

```
Student 3: 67 (D)
```

```
Student 4: 45 (F)
```

```
Student 5: 78 (C)
```

```
===== GRADE DISTRIBUTION =====
```

```
A: 1 student(s)
```

```
B: 1 student(s)
```

```
C: 1 student(s)
```

```
D: 1 student(s)
```

```
F: 1 student(s)
```

```
Average Grade: 73.4
```

```
Highest Grade: 92
```

```
Lowest Grade: 45
```

## **Key Requirements:**

1. Calculate statistics (average, highest, lowest)
2. Count how many students got each letter grade

## **Grade Scale:**

- A: 90-100
- B: 80-89
- C: 70-79
- D: 60-69
- F: 0-59

