

```
import java.util.ArrayList;
import java.util.Scanner;

// Class to store student information
class Student {
    private int id;
    private String name;
    private int grade;

    public Student(int id, String name, int grade) {
        this.id = id;
        this.name = name;
        this.grade = grade;
    }

    public void displayInfo() {
        System.out.println("ID : " + id);
        System.out.println("Name : " + name);
        System.out.println("Grade: " + grade);
    }
}

// Class to manage student operations
class StudentManager {
    private ArrayList<Student> students = new ArrayList<>();

    public void addStudent(int id, String name, int grade) {
        if (grade < 0 || grade > 100) {
            System.out.println("Grade must be between 0 and 100.");
            return;
        }

        Student s = new Student(id, name, grade);
        students.add(s);
        System.out.println("✅ Student added successfully.\n");
    }

    public void viewAllStudents() {
        if (students.isEmpty()) {
            System.out.println("⚠ No students found.\n");
        } else {
            System.out.println("----- Student List -----");
            for (Student s : students) {
                s.displayInfo();
            }
        }
    }
}
```

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        System.out.println("-----");
    }
}
}
}

```

// Main class

```

public class SchoolManagementSystem {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        StudentManager manager = new StudentManager();
        int choice;

        do {
            System.out.println("===== School Management System =====");
            System.out.println("1. Add Student");
            System.out.println("2. View All Students");
            System.out.println("3. Exit");
            System.out.print("Enter your choice: ");

            try {
                choice = Integer.parseInt(sc.nextLine());

                switch (choice) {
                    case 1:
                        System.out.print("Enter Student ID: ");
                        int id = Integer.parseInt(sc.nextLine());

                        System.out.print("Enter Student Name: ");
                        String name = sc.nextLine();

                        System.out.print("Enter Grade (0–100): ");
                        int grade = Integer.parseInt(sc.nextLine());

                        manager.addStudent(id, name, grade);
                        break;

                    case 2:
                        manager.viewAllStudents();
                        break;

                    case 3:
                        System.out.println("✅ Thank you for using the system. Goodbye!");
                        break;
                }
            }
        } while (choice != 3);
    }
}

```

default:

```
System.out.println("❌ Invalid choice. Please try again.\n");
```

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}
```

```
} catch (NumberFormatException e) {
```

```
System.out.println("❌ Error: Please enter valid numbers.\n");
```

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choice = 0;
```

```
}
```

```
} while (choice != 3);
```

```
sc.close();
```

```
}
```

```
}
```