**Implementing the MVC Pattern**

**MVCPatternExample:**

class Student {

    private String name;

    private String id;

    private String grade;

    public Student(String name, String id, String grade) {

        this.name = name;

        this.id = id;

        this.grade = grade;

    }

    public String getName() { return name; }

    public String getId() { return id; }

    public String getGrade() { return grade; }

    public void setName(String name) { this.name = name; }

    public void setId(String id) { this.id = id; }

    public void setGrade(String grade) { this.grade = grade; }

}

class StudentView {

    public void displayStudentDetails(String name, String id, String grade) {

        System.out.println("Student Details:");

        System.out.println("Name : " + name);

        System.out.println("ID   : " + id);

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

    }

}

class StudentController {

    private Student model;

    private StudentView view;

    public StudentController(Student model, StudentView view) {

        this.model = model;

        this.view = view;

    }

    public void setStudentName(String name) {

        model.setName(name);

    }

    public void setStudentId(String id) {

        model.setId(id);

    }

    public void setStudentGrade(String grade) {

        model.setGrade(grade);

    }

    public void updateStudentView() {

        view.displayStudentDetails(model.getName(), model.getId(), model.getGrade());

    }

}

public class MVCPatternExample {

    public static void main(String[] args) {

        Student student = new Student("Elsa", "S004", "A+");

        StudentView view = new StudentView();

        StudentController controller = new StudentController(student, view);

        controller.updateView();

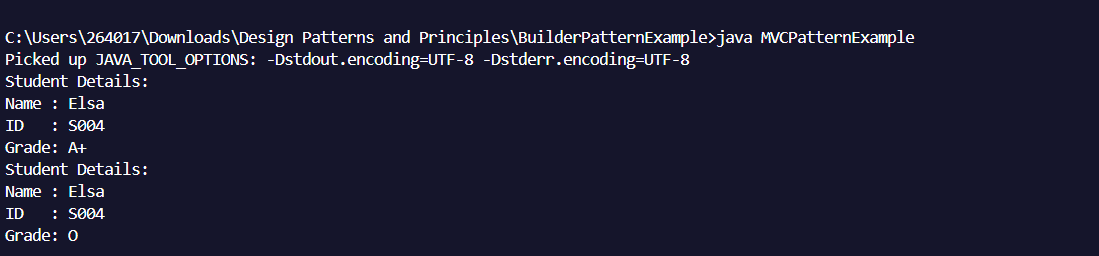
        controller.setStudentName("Elsa");

        controller.setStudentGrade("O");

        controller.updateStudentView();

    }

}

**Output:**