**Exercise 10: Implementing the MVC Pattern**

**Source Code:**

**Student.java**

public class Student {

private String name; private int id; private String grade;

public Student(String n,int i,String g){name=n;id=i;grade=g;}

public String getName(){return name;} public void setName(String n){name=n;}

public int getId(){return id;}

public String getGrade(){return grade;} public void setGrade(String g){grade=g;}

}

**StudentView.java**

public class StudentView {

public void display(Student s){

System.out.println("Student "+s.getId()+" | "+s.getName()+" | "+s.getGrade());

}

}

**StudentController.java**

public class StudentController {

private final Student m; private final StudentView v;

public StudentController(Student m,StudentView v){this.m=m;this.v=v;}

public void updateName(String n){m.setName(n);}

public void updateGrade(String g){m.setGrade(g);}

public void show(){v.display(m);}

}

**MVCDemo.java**

public class MVCDemo {

public static void main(String[] a){

Student s=new Student("Alice",101,"A");

StudentView v=new StudentView();

StudentController c=new StudentController(s,v);

c.show();

c.updateGrade("A+");

c.show();

}

}

**Output:**

**A computer screen shot of a computer program

AI-generated content may be incorrect.**