An MVC Application

```
import java.util.*;
public class Student {
    private int ID;
    private String Name;                    MODEL
    private Date DOB;
    public int getID() {
            return ID;
    }
    public void setID(int ID) {
            this.ID=ID;
    }
    public Date getDOB(){
            return DOB;
    }
    public void setDOB(Date DOB){
            this.DOB=DOB;
    }
    public String getName() {
            return Name;
    }
    public void setName(String Name) {
            this.Name = Name;
    }
}
```

```
import java.text.SimpleDateFormat;
import java.util.*;                        VIEW
public class StudentView {
    public void printStudent(String Name, int ID, Date DOB){
            SimpleDateFormat df=new SimpleDateFormat("MM/dd/yyyy");
            System.out.println("Student Name: " + Name);
            System.out.println("Student ID: " + ID);
            System.out.println("Student DOB: " + df.format(DOB));
    }
}
```

```
public class StudentController {
    private Student model;
    private StudentView view;
    public StudentController(Student model, StudentView view){
        this.model = model;
        this.view = view;
    }                                       CONTROLLER
    public void setName(String name){
        model.setName(name);
    }
    public String getName(){
        return model.getName();
    }
    public void setID(int ID){
        model.setID(ID);
    }
    public int getID(){
        return model.getID();
    }
    public void updateView(){
        view.printStudent(model.getName(), model.getID(), model.getDOB());
    }
}
```

```
import java.text.SimpleDateFormat;
public class MVCDemo {
  public static void main(String[] args) throws Exception {
      //Get Student data
      Student model  = getStudentFromDatabase();
      //Create a view
      StudentView view = new StudentView();
      //get hold of a controller
      StudentController controller = new StudentController(model, view);
      // Show current view
      controller.updateView();
      //update model data - represents some user interaction
      controller.setName("Emily");
      //show current view
      controller.updateView();
  }
  private static Student getStudentFromDatabase() throws Exception {
      SimpleDateFormat df=new SimpleDateFormat("MM/dd/yyyy");
      Student student = new Student();
      student.setName("Denise");
      student.setID(10);
      student.setDOB(df.parse("10/12/1990"));
      return student;
  }
}
```

```
Week10 easwarac$ javac MVCDemo.java
Week10 easwarac$ java MVCDemo
Name: Denise
ID: 10
DOB: 10/12/1990
Name: Emily
ID: 10
DOB: 10/12/1990
Week10 easwarac$
```