Name: Jayaprakash   **Experiment no:** 5

Uid: 23BAI70240

Aim:

To implement a student management system using MVC pattern with Node.js, Express, and MongoDB.

CODE:

Model (models/Student.js):

```
const mongoose = require('mongoose');


const studentSchema = new mongoose.Schema({
  name: { type: String, required: true },
  rollNo: { type: String, unique: true },
  grades: [{
    subject: String,
    score: Number
  }]
});
```

```javascript
module.exports = mongoose.model('Student', studentSchema);
```

Controller (controllers/studentController.js):

```javascript
const Student = require('../models/Student');


exports.createStudent = async (req, res) => {
  try {
    const student = await Student.create(req.body);
    res.status(201).json(student);
  } catch (err) {
    res.status(400).json({ error: err.message });
  }
};


exports.getStudents = async (req, res) => {
  try {
    const students = await Student.find();
```

```
    res.status(200).json(students);

  } catch (err) {

    res.status(500).json({ error: err.message });

  }

};
```

View (views/list.ejs):

```
<% students.forEach(student => { %>

  <div class="student">

    <h3><%= student.name %></h3>

    <p>Roll No: <%= student.rollNo %></p>

  </div>

<% }); %>
```