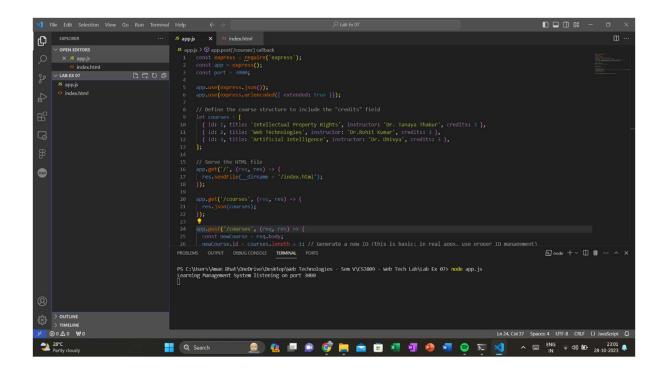LAB EXERCISE 07 – EXPRESSJS ROUTING

*Program:-*

App.js

```
const express = require('express');
const app = express();
const port = 3000;

app.use(express.json());
app.use(express.urlencoded({ extended: true }));

// Define the course structure to include the "credits" field
let courses = [
  { id: 1, title: 'Intellectual Property Rights', instructor: 'Dr. Tanaya Thakur', credits: 3 },
  { id: 2, title: 'Web Technologies', instructor: 'Dr.Rohit Kumar', credits: 3 },
  { id: 3, title: 'Artificial Intelligence', instructor: 'Dr. Dhivya', credits: 3 },
];

// Serve the HTML file
app.get('/', (req, res) => {
  res.sendFile(__dirname + '/index.html');
});

app.get('/courses', (req, res) => {
  res.json(courses);
});

app.post('/courses', (req, res) => {
  const newCourse = req.body;
```

```javascript
  newCourse.id = courses.length + 1; // Generate a new ID (this is basic; in real apps, use proper ID management)

  courses.push(newCourse);

  res.status(201).json(newCourse);

});


app.listen(port, () => {

  console.log(`Learning Management System listening on port ${port}`);

});
```

Index.html

```html
<!DOCTYPE html>
<html>
<head>
  <title>Learning Management System</title>
</head>
<body>
  <h1>Learning Management System</h1>

  <h2>Add Course</h2>
  <form action="/courses" method="post">
   <label for="title">Course Title:</label>
   <input type="text" id="title" name="title" required><br>
   <label for="instructor">Instructor:</label>
   <input type="text" id="instructor" name="instructor" required><br>
   <label for="credits">Number of Credits:</label>
   <input type="number" id="credits" name="credits" required><br>
```

```html
    <button type="submit">Add Course</button>
  </form>

  <h2>Courses</h2>
  <ul id="courses">
    <!-- Course list will be displayed here -->
  </ul>

  <script>
    // Fetch and display the list of courses
    fetch('/courses')
      .then(response => response.json())
      .then(courses => {
        const coursesList = document.getElementById('courses');
        courses.forEach(course => {
          const li = document.createElement('li');
          li.textContent = `Title: ${course.title}, Instructor: ${course.instructor}, Credits: ${course.credits}`;
          coursesList.appendChild(li);
        });
      });
  </script>
</body>
</html>
```

*Output:-*