

Week-10

Aim: Develop an express web application that can interact with REST API to perform CRUD operations on student data. (Use Postman)

Codes:

index.js:

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

app.use(express.json()); // to parse JSON request body

let students = []; // In-memory array to store student data
let idCounter = 1;

// CREATE - Add a new student
app.post('/students', (req, res) => {
  const student = { id: idCounter++, ...req.body };
  students.push(student);
  res.status(201).send(student);
});

// READ - Get all students
app.get('/students', (req, res) => {
  res.send(students);
});

// READ - Get a student by ID
app.get('/students/:id', (req, res) => {
  const student = students.find(s => s.id === parseInt(req.params.id));
  if (!student) return res.status(404).send({ message: "Student not found" });
  res.send(student);
});

// UPDATE - Update student by ID
app.put('/students/:id', (req, res) => {
  const student = students.find(s => s.id === parseInt(req.params.id));
  if (!student) return res.status(404).send({ message: "Student not found" });
  Object.assign(student, req.body);
```

```
res.send(student);  
});
```

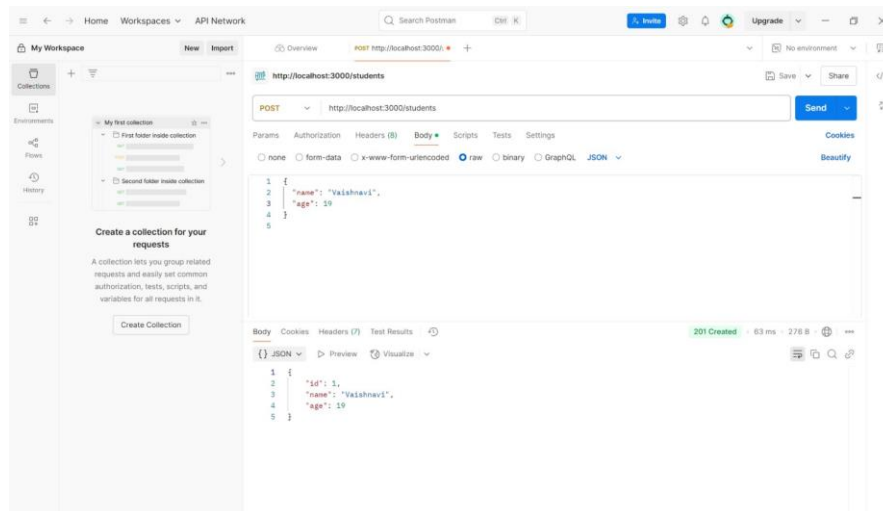
```
// DELETE - Remove student by ID  
app.delete('/students/:id', (req, res) => {  
  const index = students.findIndex(s => s.id === parseInt(req.params.id));  
  if (index === -1) return res.status(404).send({ message: "Student not found" });
```

```
  const deleted = students.splice(index, 1);  
  res.send(deleted[0]);  
});
```

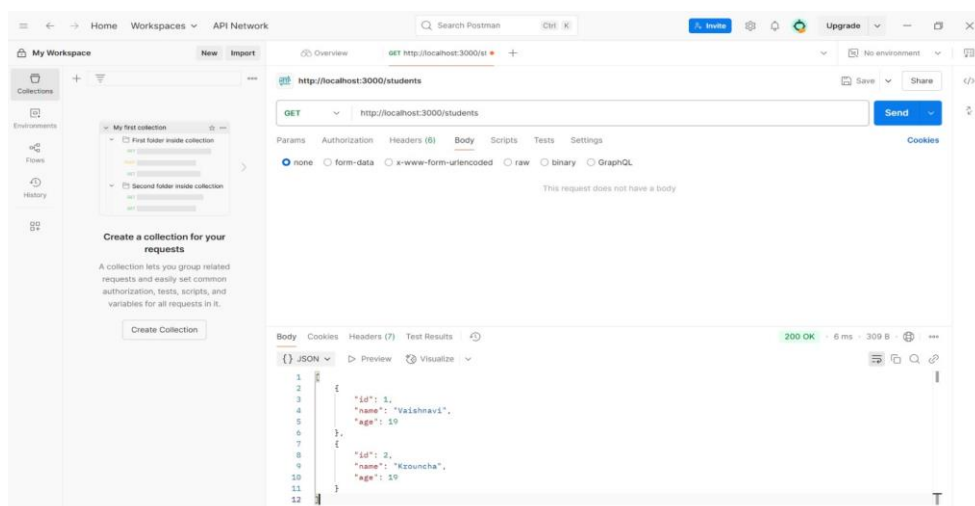
```
app.listen(port, () => {  
  console.log(`Server running at http://localhost:${port}`);  
});
```

OUTPUT :

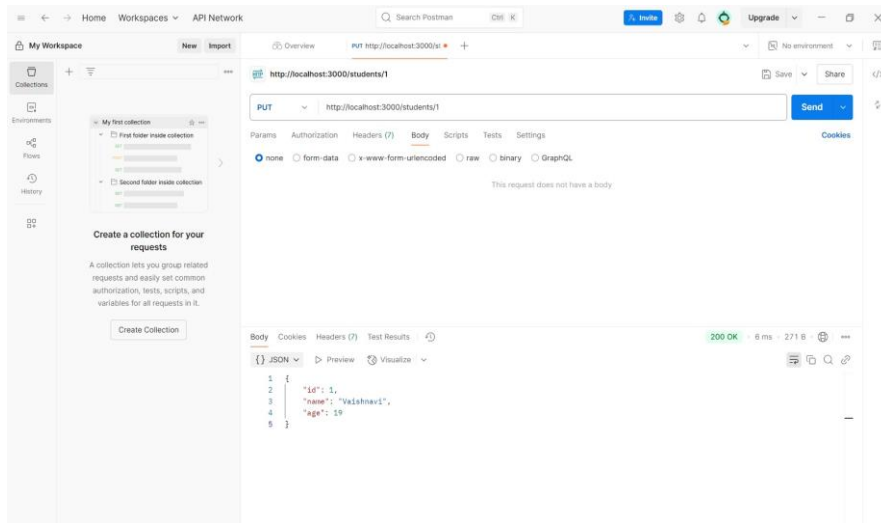
Testing Using Postman



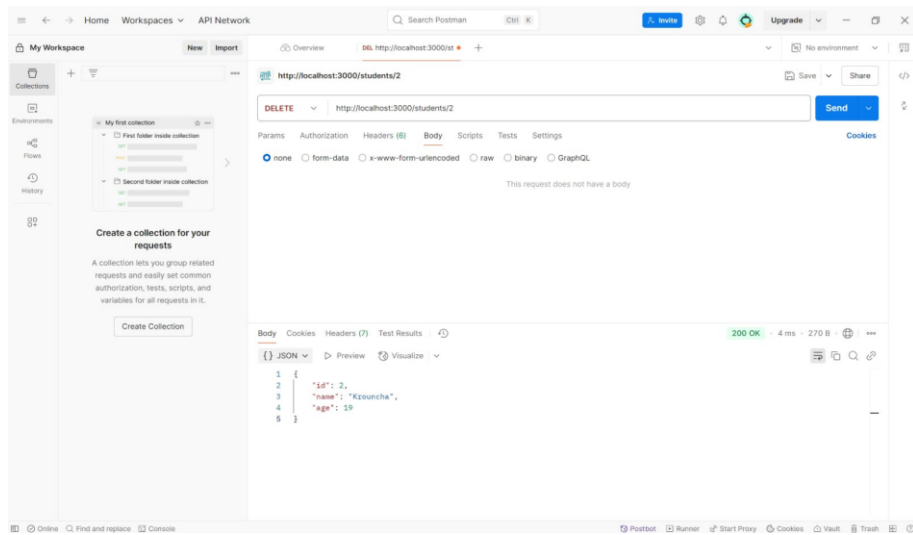
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