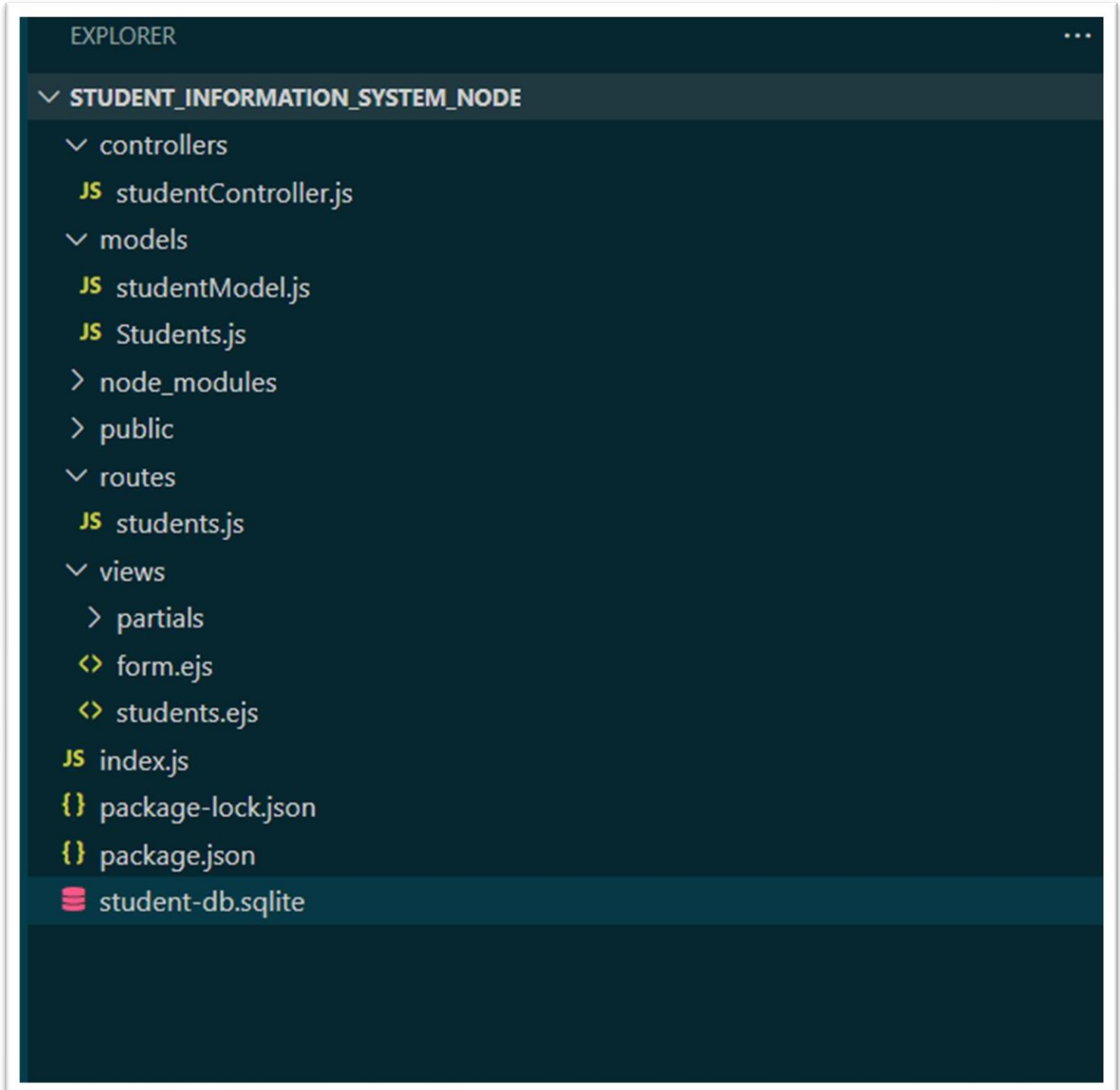




Lab#13(a). Setup Node Js project on Student Information System

Lab #13 (a)

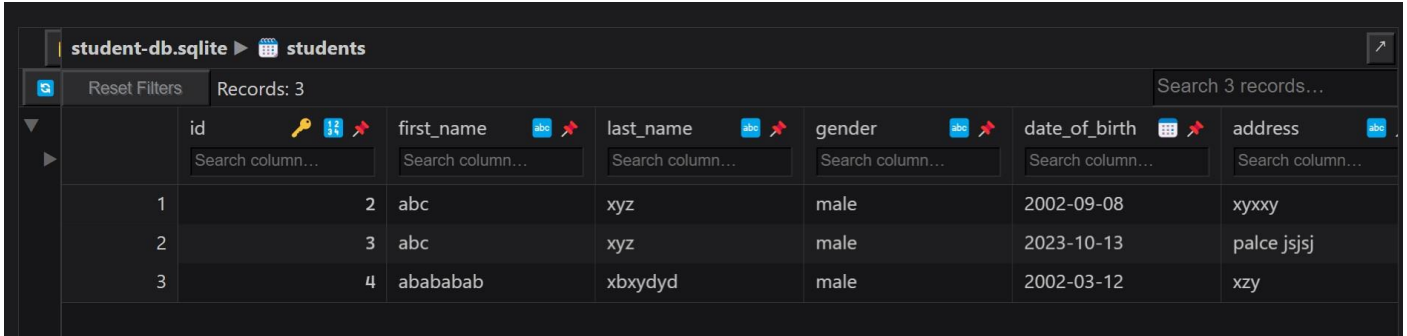
Final Outcome:



Lab#13(b)

Lab#13(b). Setup the database in Node Js for Student Information System

Final Outcome:



The screenshot shows a SQLite database viewer interface. The database is named 'student-db.sqlite' and the table is 'students'. There are 3 records displayed. The columns are: id, first_name, last_name, gender, date_of_birth, and address. Each column has a search bar above it.

	id	first_name	last_name	gender	date_of_birth	address
1	2	abc	xyz	male	2002-09-08	xyxy
2	3	abc	xyz	male	2023-10-13	palce jsjsj
3	4	abababab	xbxydyd	male	2002-03-12	xzy

Code Snippets:

```
const sqlite3 = require('sqlite3').verbose();
const db = new sqlite3.Database('student-db.sqlite');
```

```
db.serialize(() => {
  db.run(`
    CREATE TABLE IF NOT EXISTS students (
      id INTEGER PRIMARY KEY,
      first_name TEXT,
      last_name TEXT,
      gender TEXT,
      date_of_birth DATE,
      address TEXT,
      city TEXT,
      state TEXT,
      zipcode TEXT,
      email TEXT,
      phone_number TEXT,
      guardian_name TEXT,
      guardian_phone TEXT
    )
  `);
}, (err) => {
```

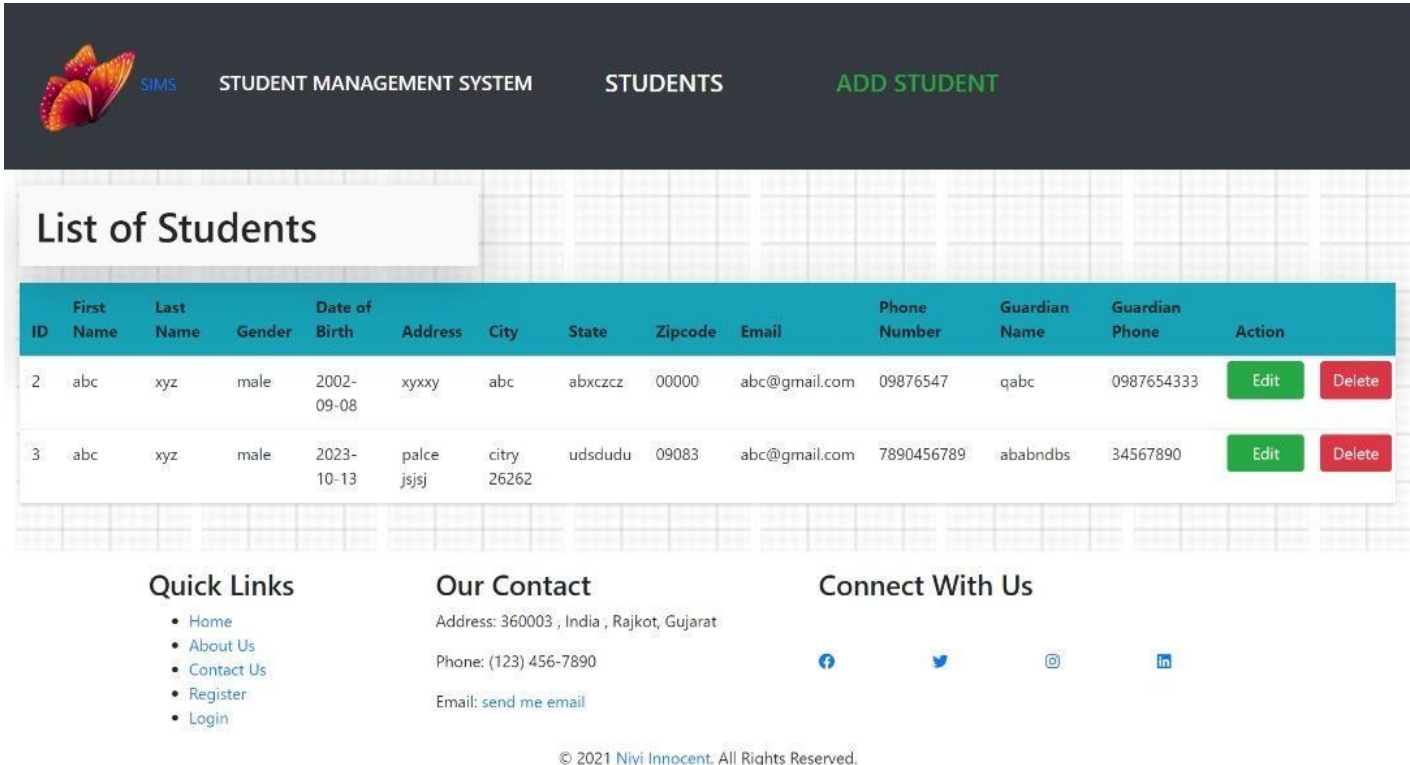
Lab#13(b)

```
if (err) {  
  
console.error("Error creating the 'students' table:", err.message);  
  } else {  
    console.log("Table 'students' created successfully.");  
  }  
});  
});  
db.close((err) => {  
  if (err) {  
    console.error("Error closing the database:", err.message);  
  } else {  
    console.log("Database closed.");  
  }  
});
```

Lab#13(c)

Lab#13(c). Implement Select Operation to fetch details of students from Student Information System.

Code Snippets:



ID	First Name	Last Name	Gender	Date of Birth	Address	City	State	Zipcode	Email	Phone Number	Guardian Name	Guardian Phone	Action
2	abc	xyz	male	2002-09-08	xyxy	abc	abxczcz	00000	abc@gmail.com	09876547	qabc	0987654333	Edit Delete
3	abc	xyz	male	2023-10-13	palce jsjsj	citry 26262	udsdudu	09083	abc@gmail.com	7890456789	ababndbs	34567890	Edit Delete

CodeSnippet:

```
// Route handler to list all students
exports.listStudents = (req, res) => {
  db.all("SELECT * FROM students", (err, students) => {
    if (err) {
      console.error(err);
      res.status(500).send("Internal Server Error");
      return;
    }

    if (students.length === 0) {
      // Handle the case where no students are found
      res.status(404).send("No Students Found");
      return;
    }
  })
}
```

```
res.render("studentsview", { students });  
});  
};  
  
const express = require("express");  
const router = express.Router();  
const studentController = require("../controllers/studentController");  
  
// Render the form for creating a student  
router.get("/form", (req, res) => {  
  res.render("form", { title: "Create Student" });  
});  
  
// Route for all students page  
router.get("/all", studentController.listStudents);
```