BACK-END TECHNOLOGIES
Experiment: -2

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Subject Name: Back End Technologies **Subject Code: 22CAH-706**

1. **Aim/Overview of the practical:**

   Q: - Store the data obtained in experiment 1 in file and use that file in another program?

2. **Introduction:**

   Node.js is an open-source, cross platform JavaScript runtime environment and library for running web applications outside the client's browser. Ryan Dhal developed it in 2009. We use node.js to create server-side web applications since it uses an asynchronous, event driven-model.

3. **Algorithm/Flowchart:**

   1. Start

   2. Set up a Node.js project and install necessary modules (e.g., readline) for user input.

   3. Take input by user about Employee

   4. Display Employee

   5. Now save all employees in the Json file.

   6. Exit

4. **Code for experiment/practical:**

   ```
   const readline = require("readline");

   const fs = require("fs"); const rl =

   readline.createInterface({   input:

   process.stdin,   output:

   process.stdout,

   }); let employees = [];

   function addEmployee() {
   ```

```javascript
rl.question("Enter
employee name: ",
(name) => {
rl.question("Enter
employee ID: ", (id) => {
rl.question("Enter
employee salary: ",
(salary) => {       const
employee = {
    id,       name,
salary: parseFloat(salary),
    };
    employees.push(employee);
console.log("Employee added successfully.");
saveDataToFile();       displayMainMenu();
   });
  });
 }); } function
displayEmployees() {
console.log("Employee List:");
console.table(employees);
displayMainMenu();
} function displayMainMenu() {
console.log("\nEmployee Salary Program");
console.log("1. Add Employee");
```
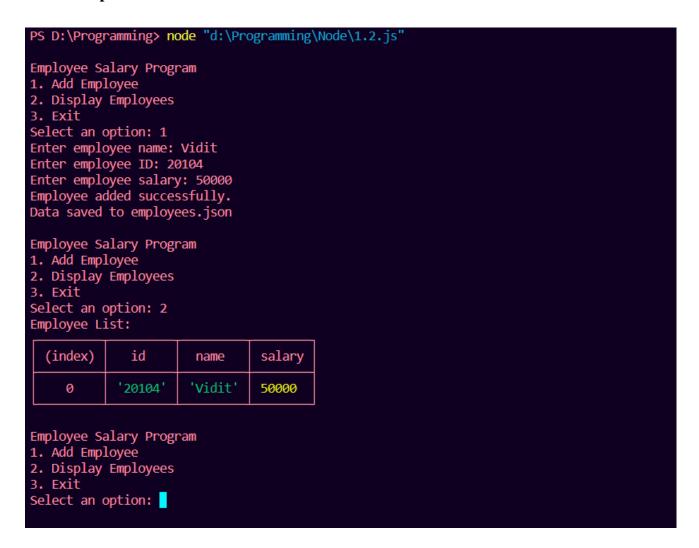
```
console.log("2. Display Employees");

console.log("3. Exit");

  rl.question("Select an option: ", (option) => {

switch (option) {      case "1":

addEmployee();        break;     case "2":

displayEmployees();       break;     case "3":

console.log("Exiting...");       rl.close();

break;     default:

    console.log("Invalid option.");

displayMainMenu();

  }

 }); } function saveDataToFile() {   const jsonData =

JSON.stringify(employees, null, 2);

fs.writeFileSync("employees.json", jsonData, "utf8");

console.log("Data saved to employees.json");

} displayMainMenu();
```

5. Output: -

```
PS D:\Programming> node "d:\Programming\Node\1.2.js"

Employee Salary Program
1. Add Employee
2. Display Employees
3. Exit
Select an option: 1
Enter employee name: Vidit
Enter employee ID: 20104
Enter employee salary: 50000
Employee added successfully.
Data saved to employees.json

Employee Salary Program
1. Add Employee
2. Display Employees
3. Exit
Select an option: 2
Employee List:
```

(index)	id	name	salary
0	'20104'	'Vidit'	50000

```
Employee Salary Program
1. Add Employee
2. Display Employees
3. Exit
Select an option: ▌
```

Learning outcomes (What I have learnt):

1. Able to learn the concepts of Node.js.

2. Able to learn about readline modules and manipulate data accordingly.

3. Able to learn how to get user input.

4. Able to learn save all data that we have inter in Json file.