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NAAC GRADE A+ ACCREDITED UNIVERSITY

Worksheet 2

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

1. **Aim/Overview of the practical:**
   Q:- Store the data obtained in the experiment 1 in file and use that file in other 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 employee in 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() {
  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. Result/Output/Writing Summary:

```
[
  {
    "id": "1",
    "name": "barkha",
    "salary": 67000
  },
  {
    "id": "1",
    "name": "aniket",
    "salary": 98000
  }
]
```

```
Employee Salary Program
1. Add Employee
2. Display Employees
3. Exit
Select an option: 1
Enter employee name: barkha
Enter employee ID: 1
Enter employee salary: 67000
Employee added successfully.
Data saved to employees.json

Employee Salary Program
1. Add Employee
2. Display Employees
3. Exit
Select an option: 1
Enter employee name: aniket
Enter employee ID: 1
Enter employee salary: 98000
Employee added successfully.
Data saved to employees.json

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

Learning outcomes (What I have learnt):

- Able to learn the concepts of Node.js.
- Able to learn about readline module and manipulate data accordingly.
- Able to learn how to get user input.
- Able to learn save all data that we have inter in json file.