

Assignment 8 Nodejs File

Aim :- Write a program in Node JS to

- a. Create a file
- b. Read the data from file
- c. Write the data to a file
- d. Rename a file
- e. Append data to a file
- f. Delete a file

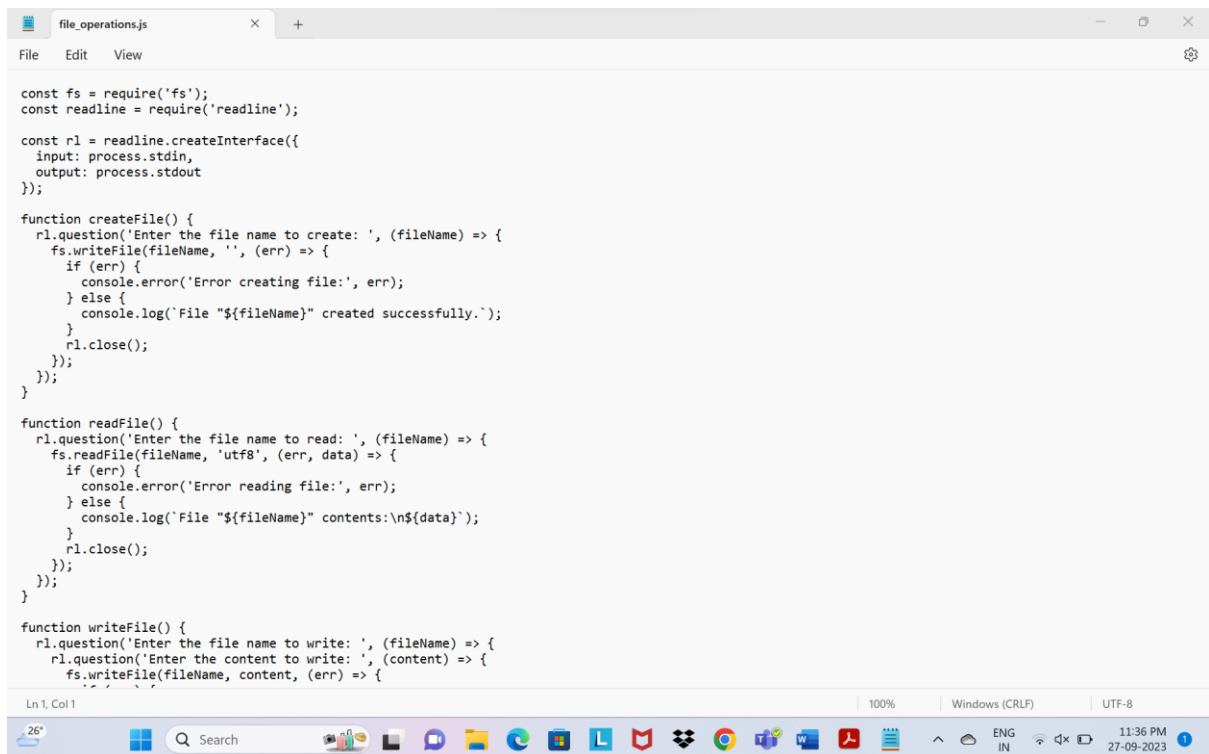
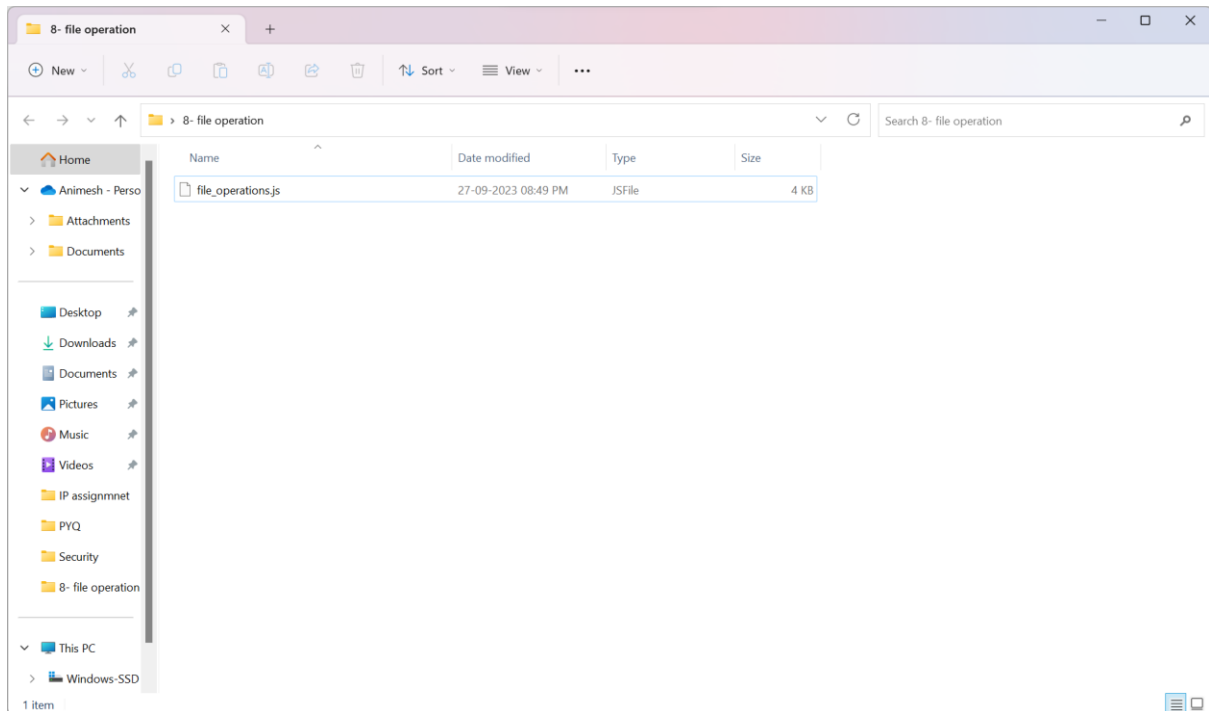
Lo mapped:- LO-6

Theory :-

Node.js is a popular JavaScript runtime environment that allows developers to build server-side applications. The assignment leverages Node.js and its built-in `fs` module for handling file-related operations. Additionally, it uses the `readline` module to interactively collect user input from the command line.

1. Creating a File (Option 'a'): The program prompts the user to enter a filename. Upon user input, it uses the `fs.writeFile` method to create an empty file with the specified name.
2. Reading Data from a File (Option 'b'): The program prompts the user to enter the filename they want to read from. It then uses the `fs.readFile` method to read the contents of the specified file and displays the content to the user.
3. Writing Data to a File (Option 'c'): Users are asked to enter both a filename and content. The program utilizes the `fs.writeFile` method to write the provided content to the specified file.
4. Renaming a File (Option 'd'): Users must input the current filename and the new filename. The program utilizes the `fs.rename` method to rename the file.
5. Appending Data to a File (Option 'e'): Users are asked to enter a filename and content to append. The program uses the `fs.appendFile` method to append the provided content to the specified file.
6. Deleting a File (Option 'f'): The program prompts the user to enter the filename they want to delete. It then uses the `fs.unlink` method to delete the specified file.

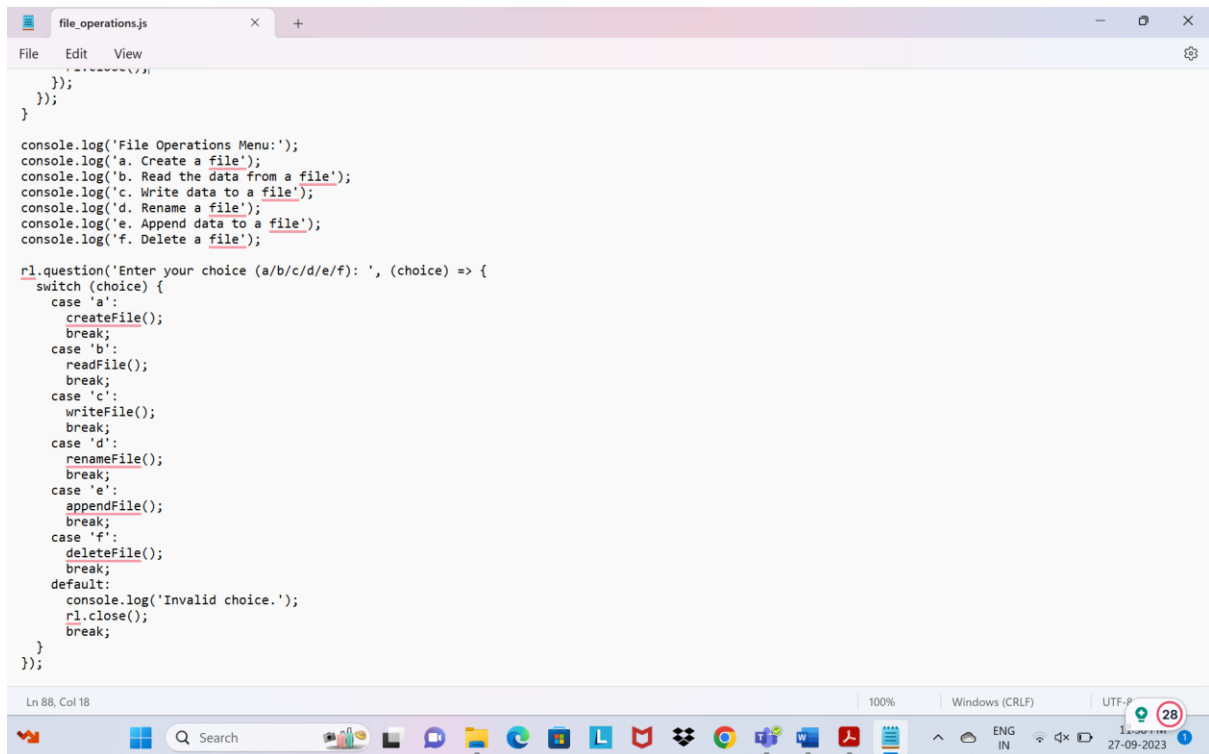
Code :-



```
file_operations.js x +
File Edit View

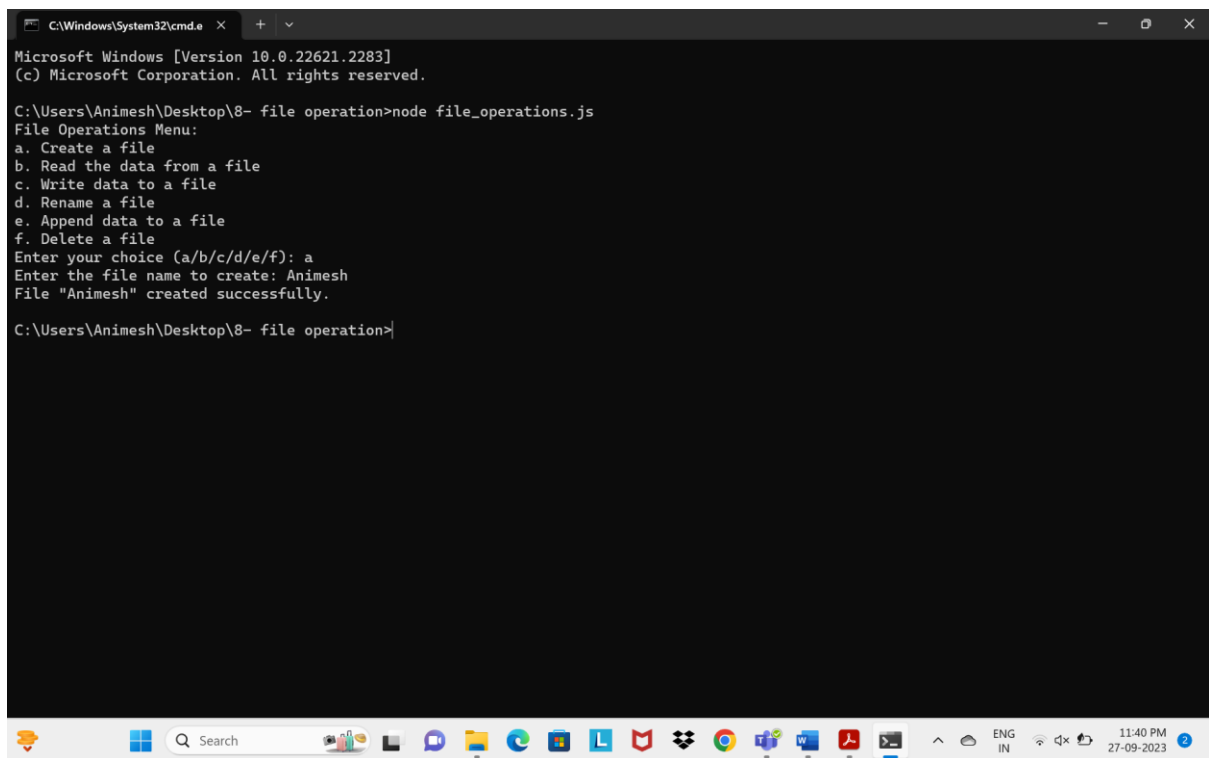
function writeFile() {
  rl.question('Enter the file name to write: ', (fileName) => {
    rl.question('Enter the content to write: ', (content) => {
      fs.writeFile(fileName, content, (err) => {
        if (err) {
          console.error('Error writing to file:', err);
        } else {
          console.log('Content written to "${fileName}" successfully.');
```

```
function renameFile() {
  rl.question('Enter the current file name: ', (currentFileName) => {
    rl.question('Enter the new file name: ', (newFileName) => {
      fs.rename(currentFileName, newFileName, (err) => {
        if (err) {
          console.error('Error renaming file:', err);
        } else {
          console.log('File "${currentFileName}" renamed to "${newFileName}" successfully.');
```

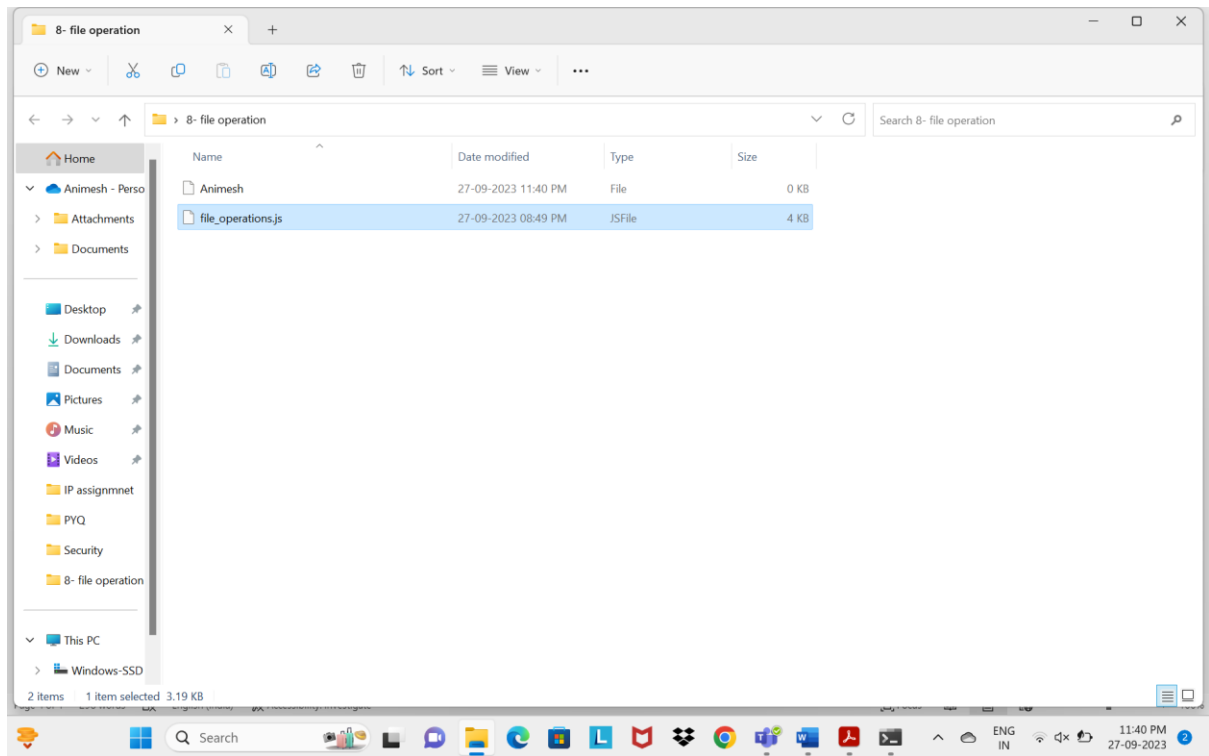


```
});  
});  
}  
  
console.log('File Operations Menu:');  
console.log('a. Create a file');  
console.log('b. Read the data from a file');  
console.log('c. Write data to a file');  
console.log('d. Rename a file');  
console.log('e. Append data to a file');  
console.log('f. Delete a file');  
  
rl.question('Enter your choice (a/b/c/d/e/f): ', (choice) => {  
  switch (choice) {  
    case 'a':  
      createFile();  
      break;  
    case 'b':  
      readFile();  
      break;  
    case 'c':  
      writeFile();  
      break;  
    case 'd':  
      renameFile();  
      break;  
    case 'e':  
      appendFile();  
      break;  
    case 'f':  
      deleteFile();  
      break;  
    default:  
      console.log('Invalid choice.');      rl.close();  
      break;  
  }  
});  
});
```

Code output :-



```
C:\Windows\System32\cmd.e x + v  
Microsoft Windows [Version 10.0.22621.2283]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Animesh\Desktop\8- file operation>node file_operations.js  
File Operations Menu:  
a. Create a file  
b. Read the data from a file  
c. Write data to a file  
d. Rename a file  
e. Append data to a file  
f. Delete a file  
Enter your choice (a/b/c/d/e/f): a  
Enter the file name to create: Animesh  
File "Animesh" created successfully.  
  
C:\Users\Animesh\Desktop\8- file operation>
```



For read a data from file and write a data from file

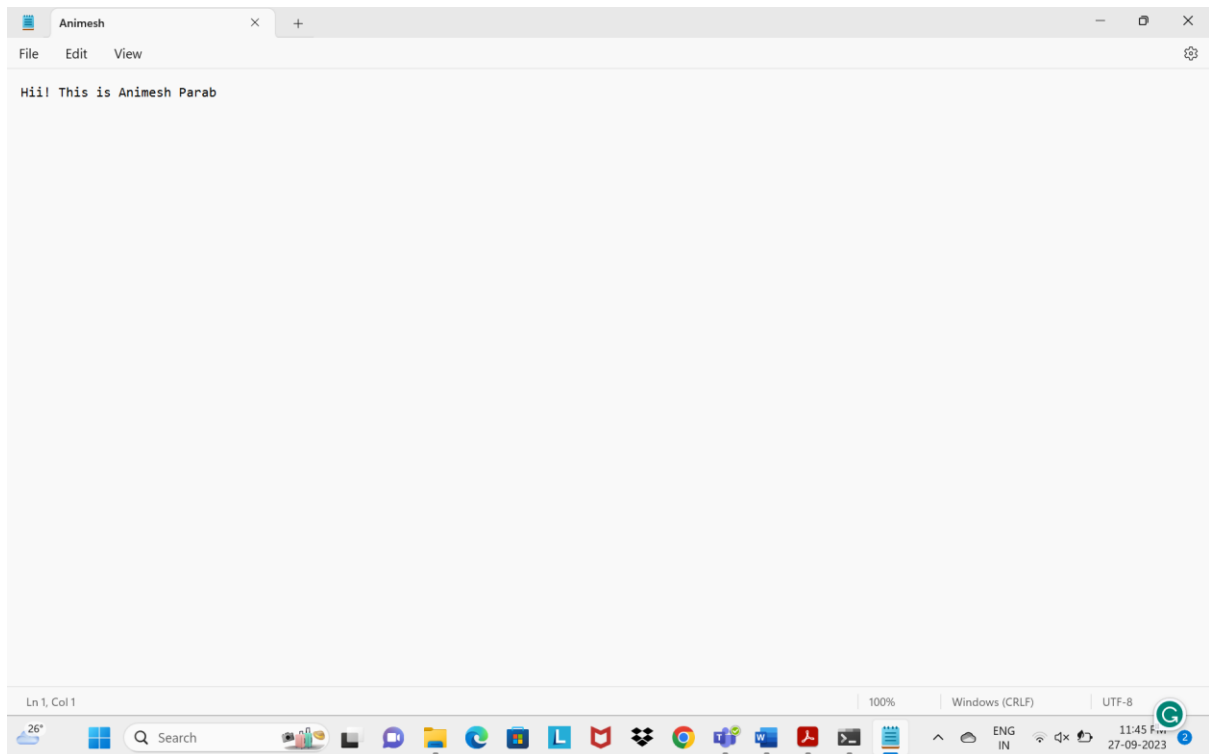
```
C:\Windows\System32\cmd.e x + v
C:\Users\Animesh\Desktop\8- file operation>node file_operations.js
File Operations Menu:
a. Create a file
b. Read the data from a file
c. Write data to a file
d. Rename a file
e. Append data to a file
f. Delete a file
Enter your choice (a/b/c/d/e/f): b
Enter the file name to read: Animesh
File "Animesh" contents:

C:\Users\Animesh\Desktop\8- file operation>node file_operations.js
File Operations Menu:
a. Create a file
b. Read the data from a file
c. Write data to a file
d. Rename a file
e. Append data to a file
f. Delete a file
Enter your choice (a/b/c/d/e/f): c
Enter the file name to write: Animesh
Enter the content to write: Hii! This is Animesh Parab
Content written to "Animesh" successfully.

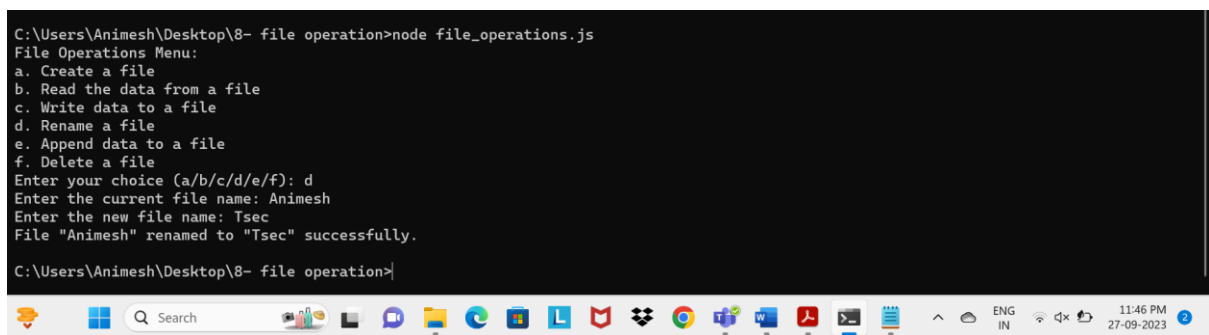
C:\Users\Animesh\Desktop\8- file operation>node file_operations.js
File Operations Menu:
a. Create a file
b. Read the data from a file
c. Write data to a file
d. Rename a file
e. Append data to a file
f. Delete a file
Enter your choice (a/b/c/d/e/f): b
```

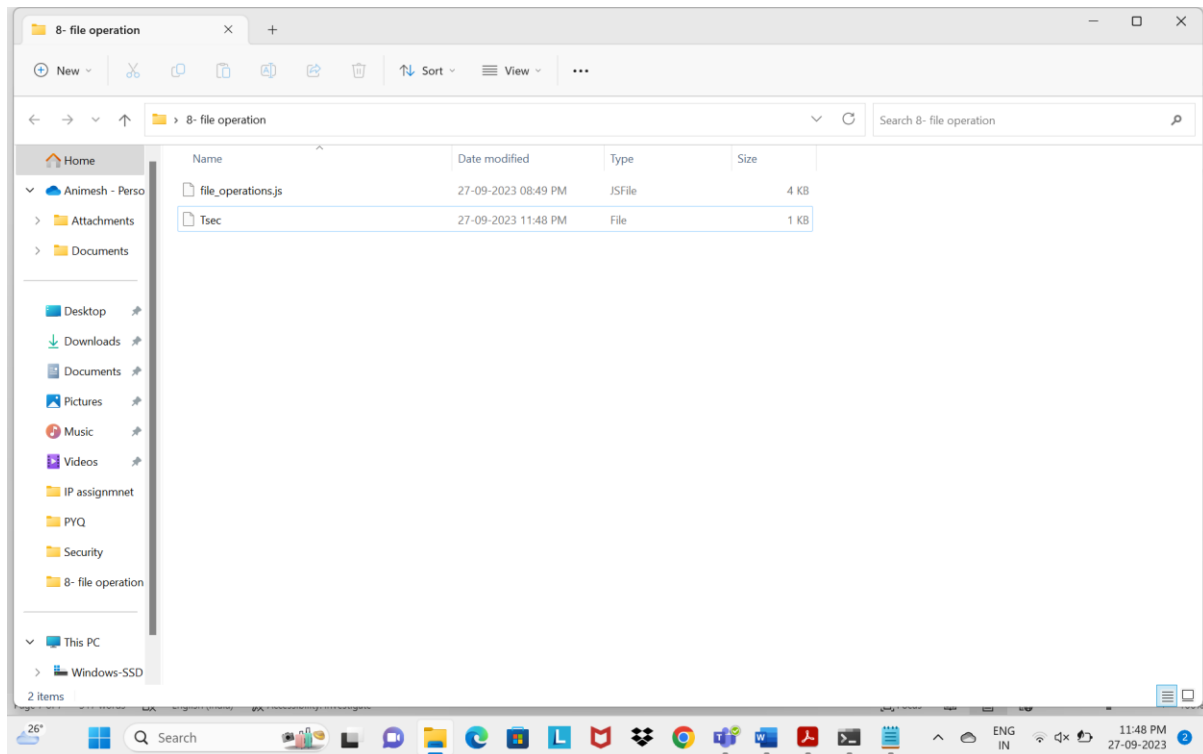
```
C:\Users\Animesh\Desktop\8- file operation>node file_operations.js
File Operations Menu:
a. Create a file
b. Read the data from a file
c. Write data to a file
d. Rename a file
e. Append data to a file
f. Delete a file
Enter your choice (a/b/c/d/e/f): b
Enter the file name to read: Animesh
File "Animesh" contents:
Hii! This is Animesh Parab

C:\Users\Animesh\Desktop\8- file operation>
```



Rename file name

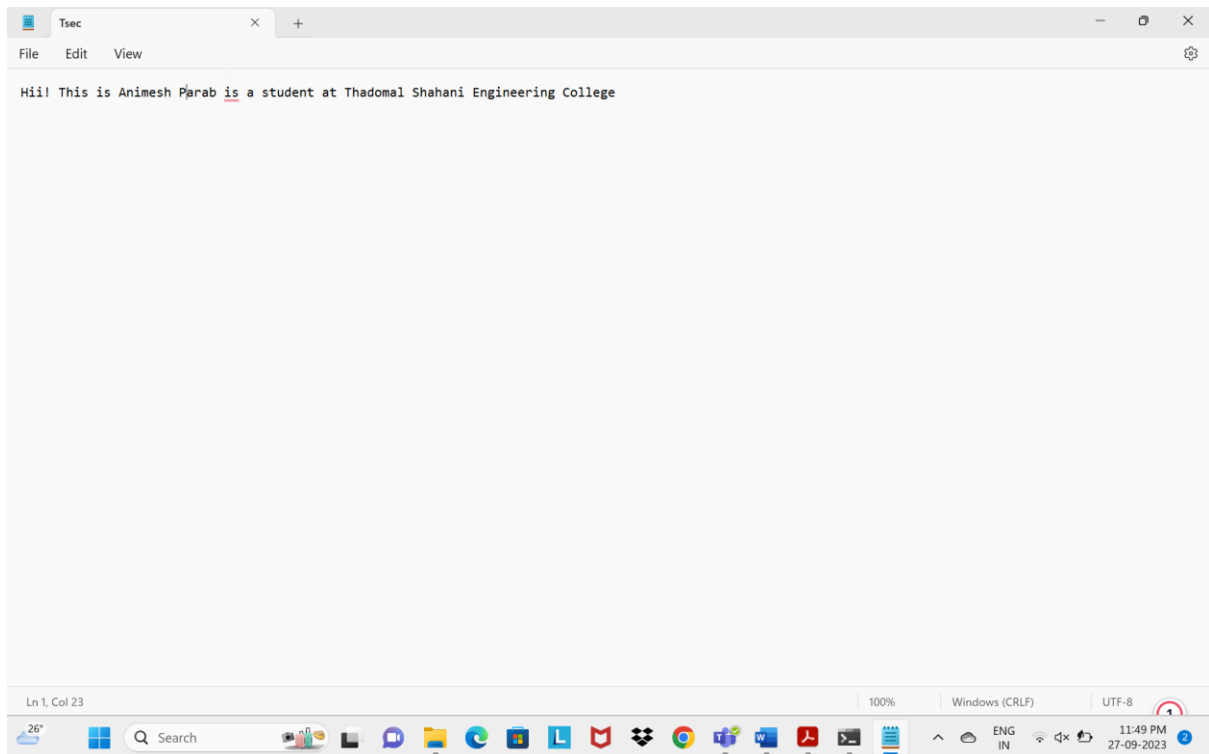




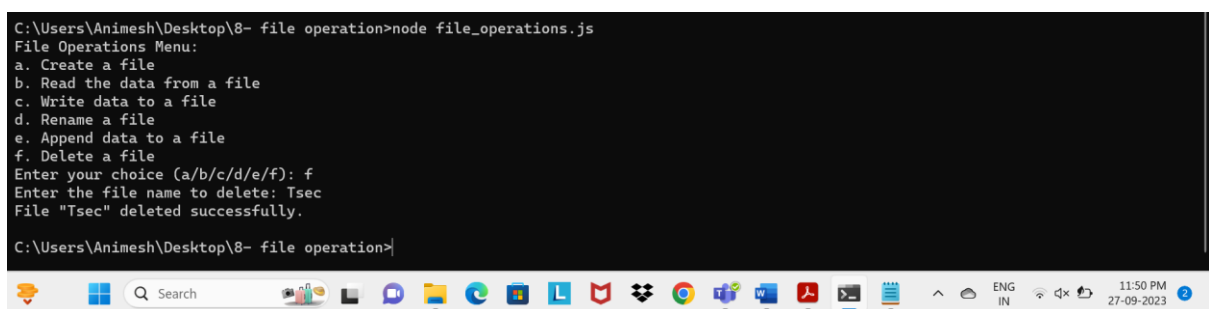
Append Data to file

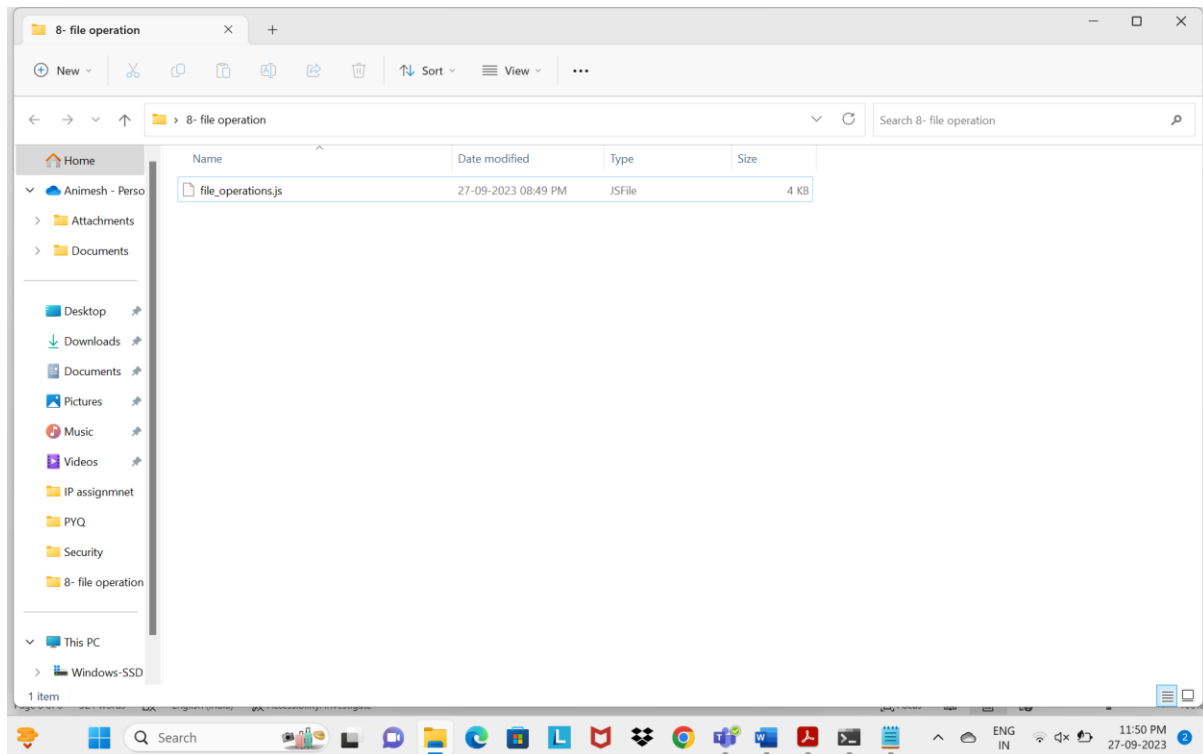
```
C:\Users\Animesh\Desktop\8- file operation>node file_operations.js
File Operations Menu:
a. Create a file
b. Read the data from a file
c. Write data to a file
d. Rename a file
e. Append data to a file
f. Delete a file
Enter your choice (a/b/c/d/e/f): e
Enter the file name to append to: TSEC
Enter the content to append: is a student at Thadomal Shahani Engineering College
Content appended to "TSEC" successfully.

C:\Users\Animesh\Desktop\8- file operation>
```

For Delete a file





Conclusion:- In this assignment, we have learned how to create a file, how to add content to a file, how to change the file name, how to append data to existing data, how to read data for a file and how to delete a file