EXPERIMENT-26

Construct a C program to implement the file management operations.

AIM:-

To construct a C program to implement file management operations such as creating, writing, reading, renaming, and deleting a file.

ALGORITHM:-

1. **Create a File**:

   - Use fopen with the "w" mode to create and open a file.

2. **Write Data to the File**:

   - Use fprintf or fputs to write data into the file.

3. **Read Data from the File**:

   - Use fgets or fscanf to read data from the file.

4. **Rename the File**:

   - Use the rename function to rename the file.

5. **Delete the File**:

   - Use the remove function to delete the file

CODE:-

#include <stdio.h>

#include <stdlib.h>

int main() {

```c
FILE *file;

char data[100];


// Create and write to a file

file = fopen("file.txt", "w");

if (file == NULL) {

    perror("Error creating file");

    return 1;

}

fprintf(file, "This is a sample file management program.\n");

fclose(file);

printf("File created and data written successfully.\n");


// Read the file

file = fopen("file.txt", "r");

if (file == NULL) {

    perror("Error opening file for reading");

    return 1;

}

printf("Reading data from the file:\n");

while (fgets(data, sizeof(data), file) != NULL) {

    printf("%s", data);

}

fclose(file);
```

```c
    // Rename the file

    if (rename("file.txt", "new_file.txt") == 0) {

        printf("\nFile renamed successfully to 'new_file.txt'.\n");

    } else {

        perror("Error renaming file");

        return 1;

    }


    // Delete the file

    if (remove("new_file.txt") == 0) {

        printf("File deleted successfully.\n");

    } else {

        perror("Error deleting file");

        return 1;

    }


    return 0;

}
```
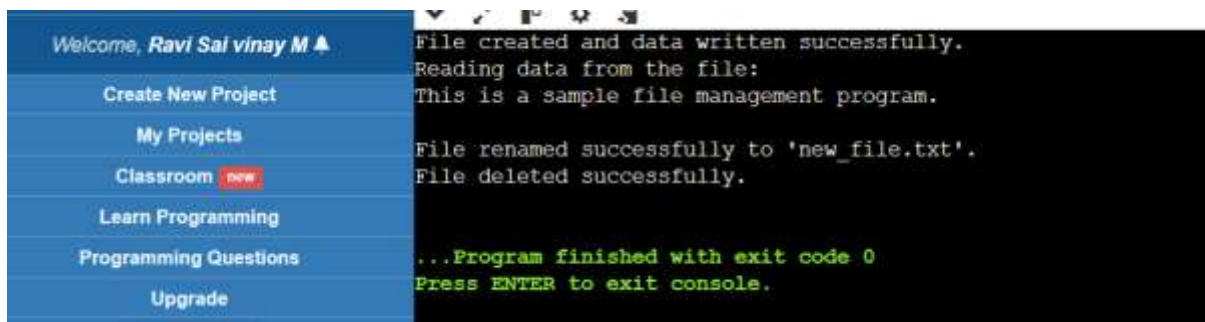
OUTPUT:-

RESULT:-

The program successfully demonstrated file management operations such as creating, writing, reading, renaming, and deleting a file using C.