c program for reading and writing the student marks data to files

#include <stdio.h>

struct Student {

char name[50];

int rollNumber;

float marks;

};

int main() {

FILE \*file;

char fileName[50];

int n;

printf("Enter the name of the file: ");

scanf("%s", fileName);

file = fopen(fileName, "w");

if (file == NULL) {

printf("Error opening file for writing.\n");

return 1; // Exit the program with an error code

}

printf("Enter the number of students: ");

scanf("%d", &n);

if (n <= 0) {

printf("Error: Please enter a positive number of students.\n");

fclose(file); // Close the file before exiting

return 1; // Exit the program with an error code

}

struct Student students[n];

for (int i = 0; i < n; ++i) {

printf("\nEnter details for student %d:\n", i + 1);

printf("Enter name: ");

scanf("%s", students[i].name);

printf("Enter roll number: ");

scanf("%d", &students[i].rollNumber);

printf("Enter marks: ");

scanf("%f", &students[i].marks);

fprintf(file, "%s %d %.2f\n", students[i].name, students[i].rollNumber, students[i].marks);

}

fclose(file);

printf("\nStudent information written to the file successfully.\n");

file = fopen(fileName, "r");

if (file == NULL) {

printf("Error opening file for reading.\n");

return 1; // Exit the program with an error code

}

printf("\nReading student information from the file:\n");

while (fscanf(file, "%s %d %f", students[0].name, &students[0].rollNumber, &students[0].marks) != EOF) {

printf("Name: %s, Roll Number: %d, Marks: %.2f\n", students[0].name, students[0].rollNumber, students[0].marks);

}

fclose(file);

return 0;

}