#include <stdio.h>

#include <stdlib.h>

#include <string.h>

**Q1:**

**Write a program to create a new text file and write some text into it. Open the file in**

**append mode and add more text to it. Read the contents of the file and display them on**

**the console.**

int main()

{

//write in a file

FILE\*file;

file=fopen("lab6.txt","w");

if(file == NULL) {

printf("Unable to open the file");

}

char write[50];

printf("enter the string you want to write in a file\n");

scanf("%s",write);

for (int i=0;i!=strlen(write);i++)

fputc(write[i],file);

fclose(file);

//append in a file

FILE\*file1;

file1=fopen("lab6.txt","a");

if(file1 == NULL) {

printf("Unable to open the file");

}

char add[50];

printf("enter the string you want to add in a file\n");

scanf("%s",add);

for (int i=0;i!=strlen(add);i++)

fputc(add[i],file1);

fclose(file1);

//read a file

FILE\*file1\_=NULL;

char read;

file1\_=fopen("lab6.txt","r");

if(file1\_ == NULL) {

printf("Unable to open the file");

}

while(!feof(file1\_))

{

read=fgetc(file1\_);

printf("%c",read);

}

fclose(file1\_);

}

**Q2:**

**Create a program that reads a text file and counts the number of words in it. Display the**

**total number of words at the end.**

FILE \*file1\_ = NULL;

char read;

int count = 1;

file1\_ = fopen("lab6.txt", "r");

if (file1\_ == NULL) {

printf("Unable to open the file");

return 1; // Return an error code to indicate failure

}

while ((read = fgetc(file1\_)) != EOF) {

if (read == ' ' || read == '\n') {

count++;

}

printf("%c", read);

}

fclose(file1\_);

printf("\nThe total number of words in a file are %d", count);

return 0;

}

**Q3.**

**Implement a student database system using a file. Include features to add, delete, modify,**

**and display student records.**

FILE\* file2;

void add() {

char name[50];

char rollnum[50];

char grade[50];

printf("enter :\nname \n rollnum\n grade\n");

scanf("%s", name);

scanf("%s", rollnum);

scanf("%s", grade);

fprintf(file2, "%s %s %s ", name, rollnum, grade);

fprintf(file2, "\n");

}

void display() {

char read;

rewind(file2);

while (!feof(file2)) {

read = fgetc(file2);

printf("%c", read);

}

}

void del() {

rewind(file2);

char target[100];

printf("enter what you want to delete from a file: ");

scanf("%s", target);

FILE\* tempfile = fopen("copydatabase.txt", "w");

if (tempfile == NULL) {

printf("Unable to open the file");

return;

}

char buffer[1000];

while (fgets(buffer, sizeof(buffer), file2) != NULL) {

// Check if the target string is present in the line

char\* found = strstr(buffer, target);

if (found == NULL) {

// Write lines without the target string to the temporary file

fputs(buffer, tempfile);

}

}

fclose(file2);

fclose(tempfile);

// Remove the original file

if (remove("database.txt") != 0) {

printf("Error removing original file");

return;

}

// Rename the temporary file to the original filename

if (rename("copydatabase.txt", "database.txt") != 0) {

printf("Error renaming temporary file");

return;

}

file2 = fopen("database.txt", "a");

Int main(){

file2 = fopen("database.txt", "a");

if (file2 == NULL) {

printf("Unable to open the file");

return 1;

}

int choice;

printf("1.to add in a file\n 2.to delete form a file\n 3.to display the content of a file\n 4 to exit");

scanf("%d",&choice);

switch(choice){

case 1:

add();

break;

case 2:

del();

break;

case 3:

display();

break;

case 4:

return;

default:

printf("Invalid choice\n");

break;

fclose(file2); }

return 0;

}