

1. Write a C program to read name and marks of n number of students from user and store them in a file.

```
#include <stdio.h>
int main()
{
    char name[50];
    int marks, i, num;

    printf("Enter number of students: ");
    scanf("%d", &num);

    FILE *fptr;
    fptr = (fopen("C:\\student.txt", "w"));
    if(fptr == NULL)
    {
        printf("Error!");
        exit(1);
    }

    for(i = 0; i < num; ++i)
    {
        printf("For student%d\nEnter name: ", i+1);
        scanf("%s", name);

        printf("Enter marks: ");
        scanf("%d", &marks);

        fprintf(fptr, "\nName: %s \nMarks=%d \n",
name, marks);
    }

    fclose(fptr);
    return 0;
}
```

2. Write a C program to read name and marks of n number of students from user and store them in a file. If the file previously exists, add the information of n students.

```
#include <stdio.h>
int main()
{
    char name[50];
    int marks, i, num;

    printf("Enter number of students: ");
    scanf("%d", &num);

    FILE *fptr;
    fptr = (fopen("C:\\student.txt", "a"));
    if(fptr == NULL)
    {
        printf("Error!");
        exit(1);
    }

    for(i = 0; i < num; ++i)
    {
        printf("For student%d\nEnter name: ", i+1);
        scanf("%s", name);

        printf("Enter marks: ");
        scanf("%d", &marks);

        fprintf(fptr, "\nName: %s \nMarks=%d \n",
name, marks);
    }

    fclose(fptr);
    return 0;
}
```

3. Write a C program to write all the members of an array of structures to a file using fwrite(). Read the array from the file and display on the screen.

```
#include <stdio.h>
struct student
{
    char name[50];
    int height;
};
int main(){
    struct student stud1[5], stud2[5];
    FILE *fptr;
    int i;

    fptr = fopen("file.txt","wb");
    for(i = 0; i < 5; ++i)
    {
        fflush(stdin);
        printf("Enter name: ");
        gets(stud1[i].name);

        printf("Enter height: ");
        scanf("%d", &stud1[i].height);
    }

    fwrite(stud1, sizeof(stud1), 1, fptr);
    fclose(fptr);

    fptr = fopen("file.txt", "rb");
    fread(stud2, sizeof(stud2), 1, fptr);
    for(i = 0; i < 5; ++i)
    {
        printf("Name: %s\nHeight: %d",
stud2[i].name, stud2[i].height);
    }
    fclose(fptr);
}
```