Structs, Strings and Pointers

Create a student report card application using structs, pointers, and proper file organization.

TASK REQUIREMENTS:

Part 1: Student Record Creation

- Define StudentRecord struct with:
  - StudentID (int)
  - LastName (char[21])
  - FirstName (char[21])
  - Array of 4 CourseRecords (struct with CourseName char[21] and Mark float)
  - AverageMark (float)
- Create function to initialize student records for 4 students via user input

Part 2: Average Calculation

- Develop function to calculate and set AverageMark for each student

Part 3: Report Generation

- Create function to print formatted report cards showing:
  - Student ID, First/Last Name
  - All courses with marks
  - Calculated average

General Requirements:

- Organize code in src/ and inc/ folders
- studentRecord.c for operations
- studentRecord.h for prototypes
- Clear comments and consistent formatting

SAMPLE OUTPUTS

Student input for 1 student:

```
C:\PROG2007\ASSIGN3\cmake-build-debug\ASSIGN3.exe
Please enter the Student ID:
9010853
Please enter the last name for Student #9010853:
Johnson
Please enter the first name for Student #9010853:
Alice
Please enter the course name:
```

```
JUMP0500
Please enter the mark for JUMP0500:
88
Please enter the course name:
ZXYW0789
Please enter the mark for ZXYW0789:
79
Please enter the course name:
LIME0420
Please enter the mark for LIME0420:
96
Please enter the course name:
HJKL1500
Please enter the mark for HJKL1500:
92

Process finished with exit code 0
```

Report card for 1 student:

```
C:\PROG2007\ASSIGN3\cmake-build-debug\ASSIGN3.exe
*****************************REPORT CARDS*******************************

Student: ID:9010853          Name: Alice Johnson
-------------------------------------
Course name: JUMP0500             Course mark: 88
Course name: ZXYW0789             Course mark: 79
Course name: LIME0420             Course mark: 96
Course name: HJKL1500             Course mark: 92

Grade average: 88.75


Process finished with exit code 0
```

REMEMER: your assignment should accept inputs & output report cards for 2 students.

Submission Instructions

Video Recording Submission:

You will demonstrate the completion of this project via a **video screen-capture recording** of you using CLion, GitBash, and viewing your code to show completion of the **Video Submission Checklist**, which is posted on Brightspace. You will post **either your video file or a link to it** (e.g. a Microsoft Stream recording, make sure to give the instructor permissions to watch it), to the Brightspace Assignment 3 Dropbox prior to the deadline. If you are not sure of how best to capture such a video, seek advice from the instructor prior to the deadline.

NOTE: MAKE SURE TO SHOW EVERYTHING IN THE VIDEO SUBMISSION CHECKLIST STEP-BY-STEP. YOU WILL NEED AUDIO IN THE VIDEO FOR AT LEAST THE CODE REVIEW PORTION OF THE CHECKLIST