

# Homework 07

CS-102

# Homework 7A

## Exam Grader

- One of your professors has asked you to write a program to grade the final exams, which consist of only 20 multiple-choice questions.
  - Each question has one of four possible answers: A, B, C, or D.
  - The file `CorrectAnswers.txt` contains the correct answers for all of the questions, with each answer written on a separate line.
  - The first line contains the answer to the first question, the second line contains the answer to the second question, and so forth.
- Write a program that reads the contents of the `CorrectAnswers.txt` file into a char array, and then reads the contents of another file, containing a student's answers, called `StudentAnswers.txt`, into a second char array.
  - The program should determine the number of questions that the student missed and then display the following:

# Homework 7A

## Exam Grader

- A list of the questions (by number) missed by the Student, showing the correct answer, and the incorrect answer provided by the student for each missed question.
- The total number of questions missed.
- The percentage of questions answered correctly.
- Name your program: *YourName*-Hwrk07A.cpp .
- Make sure your name is displayed along with your data.
- Also, always be sure that your name appears as a comment at the top of your program.

# Homework 7B

## Exam Grader

- Rewrite Homework 7a, assuming that you have no idea what the size of the CorrectAnswer file is.
  - Since you don't know how big the file is (i.e. how many multiple choice questions there were to grade), then a better choice of *sequence containers* might be the vector instead of the array.
- Use the same files, CorrectAnswers.txt, and StudentAnswers.txt, as before but this time determine the number of questions to grade from the size of the Vector that you make when you load all CorrectAnswers.txt into the CorrectAnswer Vector.
- You will then want to check to be sure that the StudentAnswers.txt file contains the same number of answers as the CorrectAnswers file, when you load those into a second Vector holding StudentAnswers.
- Below are the requirements for this program:

# Homework 7B

## Exam Grader

- The output should look the same as that in Homework 7A.
- Name your program: *YourName*-Hwrk07B.cpp .
- A list of the questions (by number) missed by the Student, showing the correct answer, and the incorrect answer provided by the student for each missed question.
- The total number of questions missed.
- The percentage of questions answered correctly.
- Also, always be sure that your name appears as a comment at the top of your program.
- Your program should test to be sure that there are the same number of answers given in the StudentAnswers.txt file as there are Questions in the CorrectAnswers.txt file.
  - If there are not, then the program should stop, displaying on the screen that the StudentAnswers.txt file does not have the same number of answers as there are questions. You can use a `cin.get();` to hold the error display on the screen.
- Be sure to use Vectors, not Arrays, to obtain your result.