

SCHOOL OF COMPUTER SCIENCES UNIVERSITI SAINS MALAYSIA Semester 1 Session 2021/2022

CPT 111 – Principles of Programming Week 14 Programming Lab (Revisions) ARRAYS, FUNCTIONS & FILES

Exam Grader

One of your professors has asked you to write a program to grade her 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 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.

Demonstrate a C++ 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, into a second char array. The program should determine the number of questions that the student missed and then display the following:

- A list of the questions 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. This can be calculated as Correctly Answered Questions ÷ Total Number of Questions
- If the percentage of correctly answered questions is 70% or greater, the program should indicate that the student passed the exam. Otherwise, it should indicate that the student failed the exam.