

Lab 4: Chapters 3 & 4 Switch and Loops

Exercises

3E.11) Write a switch statement to convert a letter grade into an equivalent numeric value on a four-point scale. Set the value of the variable `gradeValue` to 4.0 for an A, 3.0 for a B, 2.0 for a C, and 1.0 for a D, and 0.0 for an F. For any other letter, set the value to 0.0 and display an error message.

E4.3) Develop an algorithm for a simple game of guessing at a secret five-digit code. When the user enters a guess at the code, the program returns two values: The number of digits in the guess that are in the correct position and the sum of those digits. For example, if the secret code is 53840, and the user guesses 83241, the digits 3 and 4 are in the correct position. Thus, the program should respond with 2 and 7. Allow the user to guess a fixed number of times.

E4.10) Suppose we attend a party. To be sociable, we will shake hands with everyone else. Write a program using a `for` statement that will compute total number of handshakes that occur.