EXCERCISES

1

a. Write an application that prompts the user for a checking account balance and a savings account balance. Display the message “Checking account balance is low” if the checking account balance is less than $10. Display the message “Savings account balance is low” if the savings account balance is less than $100. Save the file as Balance.java.

b. Modify the application in Exercise 1a to display an additional message, “Both accounts are dangerously low”, if both fall below the specified limits. Save the file as Balance2.java.

2.

a. Write an application for a college’s admissions office. Prompt the user for a student’s numeric high school grade point average (for example, 3.2) and an admission test score from 0 to 100. Display the message “Accept” if the student has any of the following:

u A grade point average of 3.0 or above and an admission test score of at least 60

u A grade point average below 3.0 and an admission test score of at least 80

If the student does not meet either of the qualification criteria, display “Reject”.

Save the file as Admission.java.

b. Modify the application in Exercise 2a so that if a user enters a grade point average under 0 or over 4.0, or a test score under 0 or over 100, an error message appears instead of the “Accept” or “Reject” message. Save the file as Admission2.java.

3.Write an application that prompts the user for two integers and then prompts the user to enter an option as follows: 1 to add the two integers, 2 to subtract the second integer from the first, 3 to multiply the integers, and 4 to divide the first integer by the second. Display an error message if the user enters an option other than1 through 4 or if the user chooses the divide option but enters 0 for the second integer. Otherwise, display the results of the arithmetic. Save the file as Calculate.java.