Chapter 5

Write programs for the following and test to make sure they work. Please follow the book's guidelines or my style guidelines to write code.

1. Write a program that reads a set of integers and then finds and prints the sum of the even and odd integers.
2. Write a program that prompts the user to input a positive integer. It should then output a message indicating whether the number is a prime number.
   (Note: 1 is not a prime number. An even number is prime if it is 2. An odd integer is prime if it is not divisible by any odd integer less than or equal to the square root of the number.)
3. The following employees in a company are up for a special pay increase. You are given a file, say EmployeeData.txt, with the following data:
   Miller Andrew 65789.87 5
   Green Sheila 75892.56 6
   Sethi Amit 74900.50 6.1
   Alex Hooks 66345.45 7.2
   Maria Miller 75345.50 6.7
   Marga Harrison 80450.95 5.5
   Each input line consists of an employee's last name, first name, current salary, and percent pay increase. For example, in the first input line, the last name of the employee is Miller, the first name is Andrew, the current salary is 65789.87, and the pay increase is 5%. Write a program that reads data from the specified file and stores the output in the file EmployeeOutput.dat. If the percent pay increase is greater than or equal to 6%, then add $1000.00 to the updated salary. For each employee, the data must be output in the following form: firstName lastName updatedSalary. Format the output of decimal numbers to two decimal places. Make sure you use a while loop to read until EOF. Your program should work if I change the number of lines in the input file.