Week 3 Assignment: Cellular Bill

Directions: You are to write a C++ program that meets the instruction requirements below. Deliverables:

Your C++ source code file. (The file with the .CPP extension). No other files will be accepted. (Note: Blackboard will require the .CPP file to be <u>zipped</u> before it can be uploaded.)

A screenshot of your program running.

Program Instructions:

Write a program that calculates and prints the bill for a cellular telephone company. The company offers two types of service: regular and premium. Its rates vary, depending on the type of service. The rates are computed as follows:

Regular service: \$10.00 plus first 50 minutes are free. Charges for over 50 minutes are \$0.20 per minute.

Premium service: \$25.00 plus:

- a. For calls made from 6:00 a.m. to 6:00 p.m., the first 75 minutes are free; charges for more than 75 minutes are \$0.10 per minute.
- b. For calls made from 6:00 p.m. to 6:00 a.m., the first 100 minutes are free; charges for more than 100 minutes are \$0.05 per minute.

Your program should prompt the user to enter an account number, a service code (type char), and the number of minutes the service was used. A service code of r or R means regular service; a service code of p or P means premium service. Treat any other character as an error. Your program should output the account number, type of service, number of minutes the telephone service was used, and the amount due from the user.

For the premium service, the customer may be using the service during the day and the night. Therefore, to calculate the bill, you must ask the user to input the number of minutes the service was used during the day and the number of minutes the service was used during the night.

(See grading rubric on the following page)

Grading Criteria Assignments	Maximum Points
Program accomplishes requested operations per instructions	40
The code works and meets all assignment specifications	30
The code is organized and easy to follow and output is clear and clean	20
Uses software tools correctly and efficiently	10
Total	100