Introduction To C++ Programming Assignment 3 Reach Out and Touch Someone

Objectives: Primary objective is to learn how to use boolean expressions and conditional statements (if and switch). The secondary objective is to learn how to use CLion Integrated Development Environment (IDE) to edit, compile (translate), execute, and fix syntax and logic (semantics) error if any.

Instructions: As you did for the $2^{\rm nd}$ programming assignment, you **first** need to create a CLion C++ project using the "Check out from Version Control" option.

- Link to Github repository
 - https://github.com/gangryunguh/cop3014-p3.git
- Rename main.cpp to asg3.cpp

Second, assume you work for a long distance telephone company. Your customers have been complaining that they don't understand the formula for the cost of a long distance call. Your boss has asked you to create a program that will allow a customer to obtain a price given that the customer specifies when a call will be made and its duration.

You will first give the overall formula to the customer. You will then obtain the day of the week and time that the call originated. Next, you will get the duration of the call. You will calculate and display the price of the call using the formula shown at the beginning of the sample session which is shown in the second page.

If the customer enters any invalid data, then immediately print an appropriate error message and just return. Use the switch statement appropriately at least once.

The output does not have to match that exactly given in the sample session below. It should be clear to a customer and provide all of the information that was given. For the final price of the call you must show 2 digits to the right of the decimal point.

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The following is the sample run of the correctly implemented program.

The price for a call is calculated as follows:

20 cents a minute.
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50% off if originated on Monday, Tuesday, Wednesday, or Thursday if not between 8am to 5pm.

40% off if originated on Friday if not between 8am to noon.

75% off if originated on weekends.

 $15\,\mbox{\%}$ off on any minutes after an hour at the given rate.

7% federal tax.

Please enter a number for the appropriate selection at each prompt.

Please indicate the day the call originated.

Sunday (1), Monday (2), Tuesday (3), Wednesday (4),
Thursday (5), Friday (6), Saturday (7)
day: 6

Please enter time that call started.

hour (0-23): 20 minute (0-59): 10

Please enter the duration of the call.

minutes: 10

The price for the long distance call originating on Friday at 8:10PM is \$1.28.

Submit a single file ${\it asg3.cpp}$ to Canvas assignment course link before the posted due date.