COMSC-165

Making Decisions: Internet Service Provider

An Internet service provider has three different subscription packages for its customers:

Package A:	For $9.95 per month 10 hours of access are provided. Additional hours are $2.00 per hour
Package B:	For $14.95 per month 20 hours of access are provided. Additional hours are $1.00 per hour
Package C:	For $19.95 per month unlimited access is provided.

1. Create a class CPackage (i.e. Customer Package) that contains packages' information and related operations (including input validation).
    a. The class will have a constructor which allows user to create an object with a given plan information by passing the package name, (example: CPackage myPackage('B');
    b. The same class will also contain the default no-argument constructor and methods to set plan using letter name as well as get plan information

2. Write a program that calculates a customer's monthly bill. It should ask which package the customer has purchased and how many hours were used. It should then display the total amount due.

3. *Input Validation:*
    a. *Be sure the user only selects valid package (use class CPackage for validating if the package exists)*
    b. *Also, the number of hours used in a month cannot exceed the hours in that given month.* Months with 30 days have 720 hours, and months with 31 days have 744 hours. February,with 28 days, has 672 hours. **By asking the user for the month (by name),** and validating that the number of hours entered is not more than the maximum for the entire month. Here is a table of the months, their days, and number of hours in each.

Month	Days	Hours
January	31	744
February	28	672
March	31	744
April	30	720
May	31	744
June	30	720
July	31	744
August	31	744
September	30	720
October	31	744
November	30	720
December	31	744

HINT: do not use multiple "if/else" statements. Be smart, find relations between the months and a way to use switch statement.

4. The Program will also display how much money Package A customers would save if they purchased packages B or C, and how much money Package B customers would save if they purchased Package C. If there would be no savings, no message should be printed.