Prelim Activity 6

Java Programs – Decision Control Structure

TASK GUIDE

Due Date:

Objective: Create a program that will apply Decision Control Structure.

Requirements:

Case Background

ABC gas station is an upcoming player in the petroleum industry. Different types of gasoline are sold at the station, including regular and premium unleaded, regular and premium diesel and kerosene. To compete with other powerful industry players, the gas station would like a program that would enable them to compute the required payment given the number of liters of petroleum to be filled. Each petroleum variety's cost per liter is as follows:

Regular Gasoline	75.00
Premium Gasoline	65.00
Regular Diesel	60.00
Premium Diesel	65.00
Kerosene	80.00

Instructions

- Create a java program that would provide the required program for ABC Gas Station.
- To guide you in creating the required program, you may use the following pseudocode:
    - The program should ask the user to choose the type of gasoline. The type of petroleum will determine the price to be used for the computation. If the user inputs an invalid option, then the program should terminate.
    - The user will input the number of liters then compute the total amount. Display the total amount.
- You may use the sample display output below as basis for your program and test values when you check the correctness of your program. Always make sure to check your program for correctness by trying out different inputs.

Sample output #1:

ABC Gas Station
Choose petroleum type:

A. Regular Gasoline
B. Premium Gasoline
C. Regular Diesel
D. Premium Diesel
E. Kerosene

Input Choice: **C**

Input number of liters: **45**
Total Amount: 2700

Sample output #2:

ABC Gas Station
Choose petroleum type:

A. Regular Gasoline
B. Premium Gasoline
C. Regular Diesel
D. Premium Diesel
E. Kerosene

Input Choice: **A**

Input number of liters: **5**
Total Amount: 375

Note: User inputs are shown in red text.

Deliverable:

- Filename: PreAct6LastnameFirstname
- The java file should include comments indicating student name, date and activity name as header at the beginning of the java program.
- The java file should include comments providing the algorithm for the required program.

Rubric and Criteria:

Criteria	10 points	8 points	5 points	3 points	0 point
Program Correctness: Algorithm and logic	The program generates the perfect output. With complete header and algorithm.	The program generates an output with a minor mistake	The program generates a partially correct output	The output of the program is wrong	No submission