Distance Travelled Class and Demo

Chapter 5

**************READ THESE INSTRUCTIONS*************

CREATE A NEW PROJECT FOR THIS ASSIGNMENT

The distance a vehicle travels can be calculated as follows:

$$Distance = Speed * Time$$

Example: if a car travels 40 miles per hour for three hours, the distance travelled is 120 miles.

1. Design a class that stores the speed of a vehicle (in miles per hour). It should have a method named getDistance that returns the distance, in miles, that the vehicle has travelled for a given amount of hours. It should also have a Constructor that initializes the instance variables as appropriate.

2. Demonstrate the class in a program that uses a loop to write to a file the distance a vehicle has travelled for each hour of a time period specified by the user. For example, if a vehicle is travelling at 40 mph for a three-hour time period, the output report in the .txt file would appear as follows:

Hour	Distance Travelled
1	40
2	80
3	120

Hint: use printf

3. When complete, create a .jar file and put it in your submission folder for collection and grading.