

The supplied Java code is for a car **cruise control** system. This cruise control system consists of the following parts to control the car speed: **Brake, Engine, and Shaft**.

Those parts may be purchased from **GM** and/or **Chevy** companies.

The software team needs to test the creation of cruise control with the following **combinations**:

Allowed Parts Combination	Brake	Engine	Shaft
First combination	<i><b>GM</b></i>	<i><b>GM</b></i>	<i><b>Chevy</b></i>
Second combination	<i><b>GM</b></i>	<i><b>GM</b></i>	<i><b>GM</b></i>

Use **Abstract Factory design pattern** to ensure the required combination when creating the cruise control objects:

- 1) [15%] Draw Your design as UML class diagram.
- 2) [85%] Change the code to create the cruise control objects with the above two combination.

***Use the main() method for unit testing.***