SE311 SPRING 2018-2019 / 26-03-2019
Lab Work 6 [GRADED] : Factory/ Abs. Factory Pattern
Goal: Using Factory Patterns through an example.

1. Your task is to implement a similar program to the example "AbstractFactory.java" on Blackboard.

2. However, it will not be about Cars and car parts. Today's topic is Imperial (England, Australia, USA) and Metric (almost all Europe) system. Let us assume that you are an international mechanic and your job is to repair cars and machines. You have two types of tools: a wrench and a socket.

Socket	Wrench
	

3. Unfortunately, standards make you use two different tool kits. For instance, machines built considering Imperial standard, needs American made Wrench and Socket. On the other hand, machines built considering Metric system, needs mainland Europe made wrench and socket. Each tool comes with its name, price and size ("inch" for Imperial, "mm" for Metric). Below you can see the tools:

	Imperial	**Metric**
Wrench	Facom Wrench	Stanley Wrench
Socket	Bosch Socket	Dewalt Socket

4. **[30]** Decide your products and factories and implement your code accordingly.

5. **[10]** In main, let us assume customers brought you one European and one American car to be fixed. Gather your compatible toolkits in that order. To fix the cars.

6. **[20]** Add "Custom" as a new toolkit measurement system and add your handmade forged tools for a specific task.

	Custom
Wrench	MyWrench
Socket	MySocket

7. **[40]** Update your abstract factory. Instead of having different create methods for every product; it should have one method accepting a parameter, which indicates the type of product needs to be created.

8. Test your program. Create three different toolkits and display their information.