

Write a program for an auto parts warehouse. In the program, ask the user to input the number of parts and ask for each Auto Part. Place each Auto Part into a map using the Auto Part as the key and the number of that particular Auto Part as the value. Once all the inventory is entered, then ask for the minimum number of parts that should be in stock and print out a list of all the parts that need to be ordered, starting with the number of parts that need to be ordered followed by the particular part that needs to be ordered.

The Programmer should write a Part class that would store the particulars of a part into and sorted by the following criteria:

- 1st – Make (Ford, Chevy, Toyota, etc)
- 2nd – Model (Mustang, Phantom, Corvette, etc)
- 3rd – Same models are to be sorted by year
- 4th – Part Description, (Water Pump 21654, Power Converter 1138, Flux Capacitor 1955, etc)

The programmer is also given the PartList class and a PartsRunner class. The PartsRunner class will be provided to you:

```
import static java.lang.System.*;
import java.util.*;

public class PartsRunner
{
    public static void main(String[] args)
    {
        String partString;
        PartList warehouse = new PartList();
        Scanner input = new Scanner(in);

        out.println("Enter in the number of parts:");
        int size = input.nextInt();
        input.nextLine();
        out.println("Enter in one part per line");
        while(size>0)
        {
            size--;
            partString = input.nextLine();
            warehouse.addPart(partString);
        }
        out.println("Current Inventory");
        out.println(warehouse);
        out.println("Enter minumum stock:");
        size = input.nextInt();
        out.println("Order List");
        out.println(warehouse.orderSheet(size));
    }
}
```

Sample Run:

Enter in the number of parts:

8

Enter in one part per line

Water Pump 19934 Ford Taurus 1999

Air Filter 98765 Chevy Silverado 2002

Radiator 23102 Dodge Dakota 2001

Fuel Filter 19967 Ford Taurus 1999

Wiper Blades 12321 Chevy Camaro 2002

Water Pump 19912 Ford Expedition 1997

Water Pump 19934 Ford Taurus 1999

Air Filter 98765 Chevy Silverado 2002

Current Inventory

Chevy Camaro 2002 Wiper Blades 12321 - 1

Chevy Silverado 2002 Air Filter 98765 - 2

Dodge Dakota 2001 Radiator 23102 - 1

Ford Expedition 1997 Water Pump 19912 - 1

Ford Taurus 1999 Fuel Filter 19967 - 1

Ford Taurus 1999 Water Pump 19934 - 2

Enter mininum stock:

2

Order List

1 Chevy Camaro 2002 Wiper Blades 12321

1 Dodge Dakota 2001 Radiator 23102

1 Ford Expedition 1997 Water Pump 19912

1 Ford Taurus 1999 Fuel Filter 19967