

1.1P

```
public class VehicleHireApp {  
  
    /**  
     * @param args the command line arguments  
     */  
    public static void main(String[] args) {  
        ArrayList<Vehicle> vehicles = Init();  
        String typeCode = args[0];  
        System.out.println("\n\nList of vehicle of type " + typeCode);  
        for (Vehicle vehicle : vehicles) {  
            if (vehicle.getType().getCode().equals(typeCode)) {  
                System.out.println(vehicle);  
            }  
        }  
  
        System.out.print(  
            "\n It Will display a list of vehicles based on the vehicle type you choose \n"  
            + "1: SEDAN \n"  
            + "2: LIMO6 \n"  
            + "3: LIMO 8 \n"  
            + "4: Exit"  
        );  
  
        Integer state = 0;  
        Scanner s = new Scanner(System.in);  
  
        while (state != 4) {  
  
            System.out.print("\n Please Select an option (1-4): ");  
            state = s.nextInt();  
  
            switch (state) {  
                case 1:  
                    typeCode = "SEDAN";  
                    break;  
                case 2:  
                    typeCode = "LIMO6";  
                    break;  
                case 3:  
                    typeCode = "LIMO8";  
                    break;  
                case 4:  
                    System.out.print("GoodBye");  
                    break;  
                default:  
                    System.out.print("Invalid Input");  
            }  
  
            for (Vehicle vehicle : vehicles) {  
                if (vehicle.getType().getCode().equals(typeCode)) {  
                    System.out.println(vehicle);  
                }  
            }  
            typeCode = "";  
        }  
    }  
}
```

```

public static ArrayList<Vehicle> Init() {
    // Create the vehicle types
    VehicleType sedan = new VehicleType("SEDAN", "A standard sedan", 4);
    VehicleType limo6 = new VehicleType("LIMO6", "A six seater limo", 6);
    VehicleType limo8 = new VehicleType("LIMO8", "An eight seater limo", 8);
    // Create the vehicles
    ArrayList<Vehicle> vehicles = new ArrayList();
    vehicles.add(new Vehicle("Ed's Holden Caprice", "Silver", sedan, 2002));
    vehicles.add(new Vehicle("John's Mercedes C200", "Black", sedan, 2005));
    vehicles.add(new Vehicle("Guy's Volvo 244 DL", "Blue", sedan, 1976));
    vehicles.add(new Vehicle("Sasco's Ford Limo", "White", limo6, 2014));
    vehicles.add(new Vehicle("Peter's Ford Limo", "White", limo6, 2004));
    vehicles.add(new Vehicle("Robert's Ford Limo", "White", limo8, 2003));
    System.out.println("\n\nList of vehicles in system:");
    for (Vehicle vehicle : vehicles) {
        System.out.println(vehicle);
    }
    return vehicles;
}
}

```

The screenshot displays the Apache NetBeans IDE environment. The Project Explorer on the left shows the project structure for VehicleHireApp, including Source Packages, Test Packages, Libraries, and Test Libraries. The Source Editor in the center shows the VehicleHireApp.java file with the following code:

```

60      System.out.print("GoodBye");
61      break;

```

The Output window at the bottom right shows the program's execution. It starts with a "run:" message, followed by a list of vehicles in the system:

```

List of vehicles in system:
Ed's Holden Caprice Silver (A standard sedan) 2002
John's Mercedes C200 Black (A standard sedan) 2005
Guy's Volvo 244 DL Blue (A standard sedan) 1976
Sasco's Ford Limo White (A six seater limo) 2014
Peter's Ford Limo White (A six seater limo) 2004
Robert's Ford Limo White (An eight seater limo) 2003

```

Next, it displays a list of vehicle types:

```

List of vehicle of type SEDAN
Ed's Holden Caprice Silver (A standard sedan) 2002
John's Mercedes C200 Black (A standard sedan) 2005
Guy's Volvo 244 DL Blue (A standard sedan) 1976

```

Then, it prompts the user to select an option (1-4) for each vehicle type:

```

It Will display a list of vehicles based on the vehicle type you choose
1: SEDAN
2: LIMO6
3: LIMO 8
4: Exit
Please Select an option (1-4): 1
Ed's Holden Caprice Silver (A standard sedan) 2002
John's Mercedes C200 Black (A standard sedan) 2005
Guy's Volvo 244 DL Blue (A standard sedan) 1976

Please Select an option (1-4): 2
Sasco's Ford Limo White (A six seater limo) 2014
Peter's Ford Limo White (A six seater limo) 2004

Please Select an option (1-4): 3
Robert's Ford Limo White (An eight seater limo) 2003

Please Select an option (1-4): 4
GoodByeBUILD SUCCESSFUL (total time: 4 minutes 33 seconds)

```