



Design a **Car model class** under **package :package6** with the following attributes:

Member Field Name	Type
licenceNumber	String
Model	String
currentMileage	Double
engineSize	Integer

Mark all the attributes as private & create appropriate Getters & Setters

Design another **class as Main** under **package :package6**, where you need to implement logic as follows:

- Declare an array as Car with size 10.
- Take 10 Car's information from user and store them in specified array.
- Call **findCarList** method from Main class to get all cars information related to a given current Mileage & engine Size
- Current Mileage & engine Size values should be taken from Main class and pass to **findCarList** method as argument as well as Car array (with size 10).

Design **findCarList** method in **Car class** as follows:

- it will take current Mileage & engine Size as parameters and array of cars (with size 10)
- displays List of cars which have more than current Mileage and engine Size(both) for the given current Mileage & engine Size values.
- If there are no cars , then **shows "No cars found"**.



```
package package6;

public class CarModel {
    private String licenceNumber;
    private String model;
    private double currentMileage;
    private int engineSize;

    public String getLicenceNumber() {
        return licenceNumber;
    }

    public void setLicenceNumber(String licenceNumber) {
        this.licenceNumber = licenceNumber;
    }

    public String getModel() {
        return model;
    }

    public void setModel(String model) {
        this.model = model;
    }

    public double getCurrentMileage() {
        return currentMileage;
    }

    public void setCurrentMileage(double currentMileage) {
        this.currentMileage = currentMileage;
    }

    public int getEngineSize() {
        return engineSize;
    }

    public void setEngineSize(int engineSize) {
        this.engineSize = engineSize;
    }

    public CarModel() {
        licenceNumber = "None";
        model = "None";
        currentMileage = 0;
        engineSize = 0;
    }

    public CarModel(String licenceNumber, String model, double currentMileage, int engineSize) {
        this.licenceNumber = licenceNumber;
        this.model = model;
        this.currentMileage = currentMileage;
        this.engineSize = engineSize;
    }

    public static void findCarList(double currentMileage, int engineSize, CarModel[] cars) {
        boolean notFound = true;
        for(int i = 0; i < cars.length; i++) {
            if(Double.compare(cars[i].getCurrentMileage(), currentMileage) > 0 &&
Integer.compare(cars[i].getEngineSize(), engineSize) > 0) {
                notFound = false;
                System.out.println("Licence number : " + cars[i].getLicenceNumber());
                System.out.println("Model : " + cars[i].getModel());
                System.out.println("Current Mileage : " + cars[i].getCurrentMileage());
                System.out.println("Engine Size : " + cars[i].getEngineSize());
                System.out.println("=====");
            }
        }
        if(notFound) {
            System.out.println("No cars found");
        }
    }
}
```



```
package package6;

import java.util.Scanner;

public class Main {

    public static void main(String[] args) {

        CarModel[] cars = new CarModel[10];
        setCarsModel(cars);
    }

    public static void setCarsModel(CarModel[] cars) {
        Scanner input = new Scanner(System.in);
        for(int i = 0; i < cars.length; i++) {
            System.out.print("Enter licence number : ");
            String licenceNumber = input.next();

            System.out.print("Enter model : ");
            String model = input.next();

            System.out.print("Enter Current Mileage : ");
            double currentMileage = input.nextDouble();

            System.out.print("Enter Engine Size : ");
            int engineSize = input.nextInt();

            cars[i] = new CarModel(licenceNumber, model,
currentMileage, engineSize);

        }
        findCarModels(cars);
        input.close();
    }

    public static void findCarModels(CarModel[] cars) {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter the current mileage : ");
        double currentMileage = input.nextDouble();
        System.out.print("Enter the engine size : ");
        int engineSize = input.nextInt();
        CarModel.findCarList(currentMileage, engineSize, cars);
        input.close();
    }

}
```



output:

```
Enter licence number : a
Enter model : a
Enter Current Mileage : 1
Enter Engine Size : 1
Enter licence number : b
Enter model : b
Enter Current Mileage : 2
Enter Engine Size : 2
```

```
Enter licence number : c
Enter model : c
Enter Current Mileage : 3
Enter Engine Size : 3
Enter licence number : d
Enter model : d
Enter Current Mileage : 3
Enter Engine Size : 4
Enter licence number : e
Enter model : e
Enter Current Mileage : 3
Enter Engine Size : 5
Enter licence number : f
Enter model : f
Enter Current Mileage : 2
Enter Engine Size : 4
Enter licence number : g
Enter model : g
Enter Current Mileage : 4
Enter Engine Size : 6
Enter licence number : h
Enter model : h
Enter Current Mileage : 5
Enter Engine Size : 4
Enter licence number : i
Enter model : i
Enter Current Mileage : 3
Enter Engine Size : 7
Enter licence number : j
Enter model : j
Enter Current Mileage : 3
Enter Engine Size : 8
Enter the current mileage : 3
Enter the engine size : 4
Licence number : g
Model : g
Current Mileage : 4.0
Engine Size : 6
```

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