Design a**Car model class**under **package :package4** 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 :package4**, 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 model name and display then within this method.
- Model name 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 a model(car model) as parameter and array of cars (with size 10)
- displays List of cars for the given model from the list .
- If there are no cars, then **shows "No cars found".**

```java
package package4;

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(String model, CarModel[] cars) {

                boolean notFound = true;
                for(int i = 0; i < cars.length; i++) {
                        if(cars[i].getModel().compareTo(model) == 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");
                }

        }

}
```

```java
package package4;

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 model name to find: ");
            String modelName = input.next();
            CarModel.findCarList(modelName, 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 : 4
Enter Engine Size  : 4
Enter licence number : e
Enter model : d
Enter Current Mileage : 5
Enter Engine Size  : 5
Enter licence number : f
Enter model : d
Enter Current Mileage : 6
Enter Engine Size  : 6
Enter licence number : g
Enter model : b
Enter Current Mileage : 7
Enter Engine Size  : 7
Enter licence number : h
Enter model : a
Enter Current Mileage : 8
Enter Engine Size  : 8
Enter licence number : i
Enter model : d
Enter Current Mileage : 9
Enter Engine Size  : 9
Enter licence number : j
Enter model : a
Enter Current Mileage : 10
Enter Engine Size  : 10
Enter the model name to find: d
Licence number : d
Model : d
Current Mileage : 4.0
Engine Size : 4
=================================================
Licence number : e
Model : d
Current Mileage : 5.0
Engine Size : 5
=================================================
Licence number : f
Model : d
Current Mileage : 6.0
Engine Size : 6
=================================================
Licence number : i
Model : d
Current Mileage : 9.0
Engine Size : 9
=================================================
```