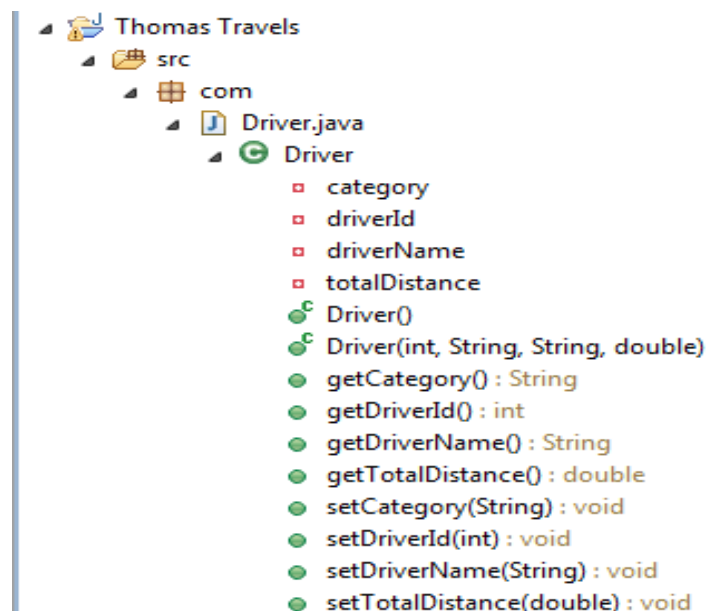z

PS1 Diagnostics

Notes:
- Go through The Problem Statement Completely
- Time Allowed is 90 minutes
- Make sure your project is created in Eclipse only
- Create all your java files in the com package.
- Make sure that the exact class outline is followed.
- You need to zip the eclipse project folder and upload the same in LMS once completed
- It is mandatory to upload eclipse project and not only java files for your code to be assessed.
- Make sure that there is no compilation error in your code before submission. Even if there is minor error, entire solution could be rejected

Problem Statement:

Thomas Travels wants to collect and automate their customer travel service process. Each driver in the thomas travels has following attributes.

1. Id of the driver
2. Name of the driver
3. Category of the driver (Auto/Car/Lorry)
4. Total distance he traveled

Create a class called **Driver** as shown below:

Create a class called **Travel** as shown below:

```
▲ J Travel.java
   ▲ G Travel
      ● isCarDriver(Driver) : boolean
      ● retrivebyDriverId(ArrayList<Driver>, int) : String
      ● retriveCountOfDriver(ArrayList<Driver>, String) : int
      ● retriveDriver(ArrayList<Driver>, String) : ArrayList<Driver>
      ● retriveMaximumDistanceTravelledDriver(ArrayList<Driver>) : Driver
```

- **isCarDriver (Driver) :** This method will check whether the given Driver class object is belonging to the category "Car". It will return true if the given Driver object is of category "Car" else return false.
- **RetrivebyDriverId (ArrayList<Driver>,driverID) :** This method will search the given driverId in the arraylist and returns the String in the following format

  Driver name is <driverName> Belonging to the category <category> traveled < totalDistance> KM so far.

  Example:
  Driver name is Sudhagar belonging to the category Car traveled 4200 KM so far.

- **RetriveCountOfDriver (ArrayList<Driver>,String) : This method will category of driver and an arraylist of driver as input and search for an category and returns the count of drivers.**

- **retriveDriver (ArrayList<Driver>,String) :** This method will category of driver and an arraylist of driver as input and search for an category. and drivers who are belonging to that category should be return as a array list.

- **RetriveMaximumDistanceTravelledDriver (ArrayList<Driver>) :** This method will return the driver who traveled maximum distance

Create a Tester Class called **TestDriver** with a main method in order to test the above methods using Driver objects.

All the best!!