Report by Ali Abdelaziz 900193664

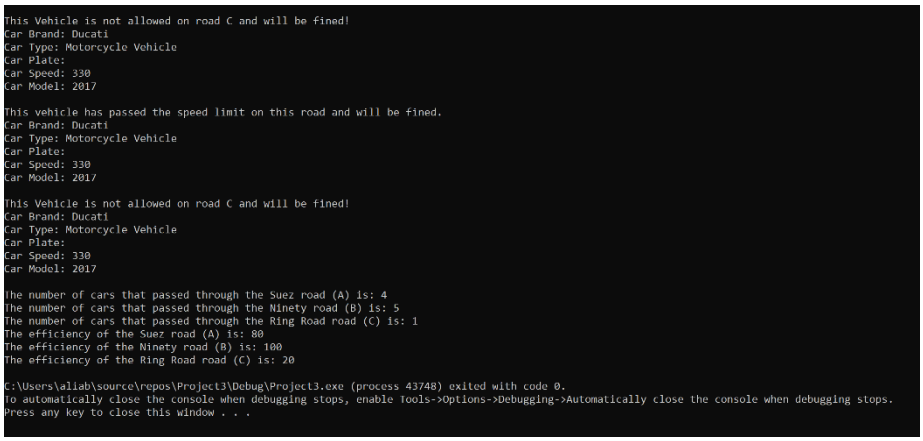
```
Car porche("Porche", "Private Vehicle", 70, 1999);
Car merc("Mercedes", "Private Vehicle", 90, 2022);
Car mercTruck("Mercedes", "Truck", 40, 2020);
Car ford("Ford", "Private Vehicle", 50, 2016);
Car Ducati("Ducati", "Motorcycle Vehicle", 330, 2017);

Road suez('A', 60);
Road ninety('B', 90);
Road ringRoad('C', 50);
```

These were the objects created, referred to in the following output

```
This vehicle has passed the speed limit on this road and will be fined.
Car Brand: Porche
Car Type: Private Vehicle
Car Plate:
Car Speed: 70
Car Model: 1999

This Vehicle is not allowed on road C and will be fined!
Car Brand: Porche
Car Type: Private Vehicle
Car Plate:
Car Speed: 70
Car Model: 1999

This Vehicle is not allowed on road C and will be fined!
Car Brand: Porche
Car Type: Private Vehicle
Car Plate:
Car Speed: 70
Car Model: 1999

This Vehicle is not allowed on road C and will be fined!
Car Brand: Porche
Car Type: Private Vehicle
Car Plate:
Car Speed: 70
Car Model: 1999

This vehicle has passed the speed limit on this road and will be fined.
Car Brand: Mercedes
Car Type: Private Vehicle
Car Plate:
Car Speed: 90
Car Model: 2022

This Vehicle is not allowed on road C and will be fined!
Car Brand: Mercedes
Car Type: Private Vehicle
Car Plate:
Car Speed: 90
Car Model: 2022

This Vehicle is not allowed on road C and will be fined!
Car Brand: Mercedes
Car Type: Private Vehicle
Car Plate:
Car Speed: 90
Car Model: 2022

This Vehicle is not allowed on road C and will be fined!
Car Brand: Mercedes
Car Type: Private Vehicle
Car Plate:
Car Speed: 90
Car Model: 2022
This Vehicle is not allowed on road A and will be fined!
Car Brand: Mercedes
Car Type: Truck
Car Plate:
Car Speed: 40
Car Model: 2020

This Vehicle is not allowed on road A and will be fined!
Car Brand: Mercedes
Car Type: Truck
Car Plate:
Car Speed: 40
Car Model: 2020

This Vehicle is not allowed on road A and will be fined!
Car Brand: Mercedes
Car Type: Truck
Car Plate:
Car Speed: 40
Car Model: 2020

This Vehicle is not allowed on road C and will be fined!
Car Brand: Ford
Car Type: Private Vehicle
Car Plate:
Car Speed: 50
Car Model: 2016

This Vehicle is not allowed on road C and will be fined!
Car Brand: Ford
Car Type: Private Vehicle
Car Plate:
Car Speed: 50
Car Model: 2016

This Vehicle is not allowed on road C and will be fined!
Car Brand: Ford
Car Type: Private Vehicle
Car Plate:
Car Speed: 50
Car Model: 2016

This vehicle has passed the speed limit on this road and wil
Car Brand: Ducati
Car Type: Motorcycle Vehicle
Car Plate:
Car Speed: 330
Car Model: 2017

This Vehicle is not allowed on road C and will be fined!
Car Brand: Ducati
Car Type: Motorcycle Vehicle
Car Plate:
Car Speed: 330
Car Model: 2017
```

< - in this portion of the code the vehicle has triggered the radar function as it passed the speed limit so it got an infraction.

< - in this portion of the code the vehicle was found to not be allowed on the road it was on and so was find an infraction



<- This portion of the code is what displays the count of how many cars were on each road

<- this portion of the code displays the efficiency of each road through the equations of the assignment