

Assignment2: (Use Chapter 9+ String Only)

Objectives:

- 1. Create Classes and Objects.
- 2. Process Array of objects.
- 3. To use the String class to process immutable strings.

Palestinian Car Agency:

A car has many attributes. Consider underneath car has the following attributes



Plate No	0123-A
Year manufacture	Current year
Month manufacture	Current moth
color	red
price	50,000.00
Manufacture by	Mercedes
Guarantee due to year	Current year
Guarantee due to month	Current moth+6

- Create a car class using at least the following 8 attributes: Plate No, Year manufacture, Month manufacture, color, and price. Note that both current year and moth are read from system.
- Create two constructors as follow:

No-argument constructor: that creates a car object using the default "Mercedes Benz" values in above example.

A constructor with arguments using the basic 8 attributes that mentioned before.

Your assignment should use the following two chart of UML:

```
Car
-PlateNo:String
-yearmanufacture:int
-monthmanufacture:int
-color:String
-price:double
-manufactureby:String
-guaranteedueyear:int
-quaranteeduemonth:int
+Car()
+Car(String PlateNo, intyearmanufacture , int
monthmanufacture ,String color,double
price, String manufactureby, guaranteedueyear
int, quaranteeduemonth int)
+getYearManufacture():int
+getMonthManufacture():int
+getColor():String
+getPrice():double
+setYearManufacture(int year):void
+setMonthManufacture(int month):void
+setColor(String color):void
+setGuarantee(int month,int year):void
+getCarAge():String
+printCarInfo():String
+getmanufactureby():String
+getCalculateGuarantee():String
```

Class Driver for Palestinian Car Agency:

Note that

- getCarAge() method must calculate the age of car in years and months and return data as string type.
- getCalculateGuarantee() method should calculate the reaming years and months for guarantee.
- 3. Guarantee date should contains the years and months remain for cars from current date.
- 4. All Output string should be printed in UPPER case.
- 5. print all information about cars with ages and guarantee due to inside class driver.

Write a *driver class* that creates an array of 5 [do not create scanner, initialize them inside class driver] Cars then passes the array to the two underneath methods:

```
1. public static void printCarsInfo( Car [ ] cars) {
   //print all information about cars with ages and guarantee due to.
}
```

2. a method named MaxPrice which will return the car object with the maximum price.

```
public static Car maxPrice( Car [ ] cars) {
}
```

Set of instructions:

- 1.Create folder at your desktop with your Assignment#, ID, and your name Example: A2_1190100_Ali Mohammad
- 2. Create a new project using Eclipse IDE and store your project inside this folder.
- 3. **Zipped** this folder and submit it by your ITC account [under meta course].

Grading policy and general notes on the Assignment:

- 1. Your application should have all functionalities working properly. Twenty percent of marks will be graded for the functionality of the assignment.
- 2. The following notes will make up the remaining 10 marks of the grade:
 - a. There has to be adequate documentation and comments in the code(i.e., methods, loops, etc.);
 - b. Your code should follow the code convention (i.e., spaces, indentations, etc.); and
- 3. Any plagiarized code will not be marked.
- 4. ANY LATE Assignment will never be accepted for any excuse.

Types of cheating:

Types of cheating:

- 1. Getting codes form outsource, like books, internet.
- 2. Cheating from any classmate.
- 3. Trying to get answers from any website.
- 4. Trying to get answers from the Facebook groups or from any social media.
- 5. Trying to get answer from Chegg website.

Deadline: Monday 2/11/2020 before 23:59

Good Luck!!