CSIT111 – Lab 3
File name: YourName_Lab_3.java (one file only)

Create a class called `PetrolPurchase` to represent information about the petrol you purchase. The class should include five pieces of information in the form of instance variables – the station location, the quantity of purchase in litres, the type of petrol, the price per litre and the percentage of discount.

Your class should have a constructor that initiates the five instance variables and a copy constructor to duplicate the objects. Provide a set and a get method for each instance variables (even my UML diagram didn't show all of them …).

In addition, include a method called `getPayment` that gets the net purchase amount computed in the `computePayment` method.

Write a java program with two classes (see UML diagram) defined in one class and `PetrolPurchase` is another independent class.

The following shows the interactions:

```
Enter the station: Bukit Timah
Enter quantity in liter: 25.5
Enter type of petrol: Super 99
Enter price of petrol: 3.55
Enter discount: 15
```

The system displays the following summary purchased:

```
Summary of your purchase
Station: Bukit Timah
Total liter: 25.50
Petrol type: Super 99
Price per liter: 3.55
Actual cost: 90.52
Discount (15%): 13.58
Amount to pay: 76.95
```

The customer decides to add in some for more litres of petrol:

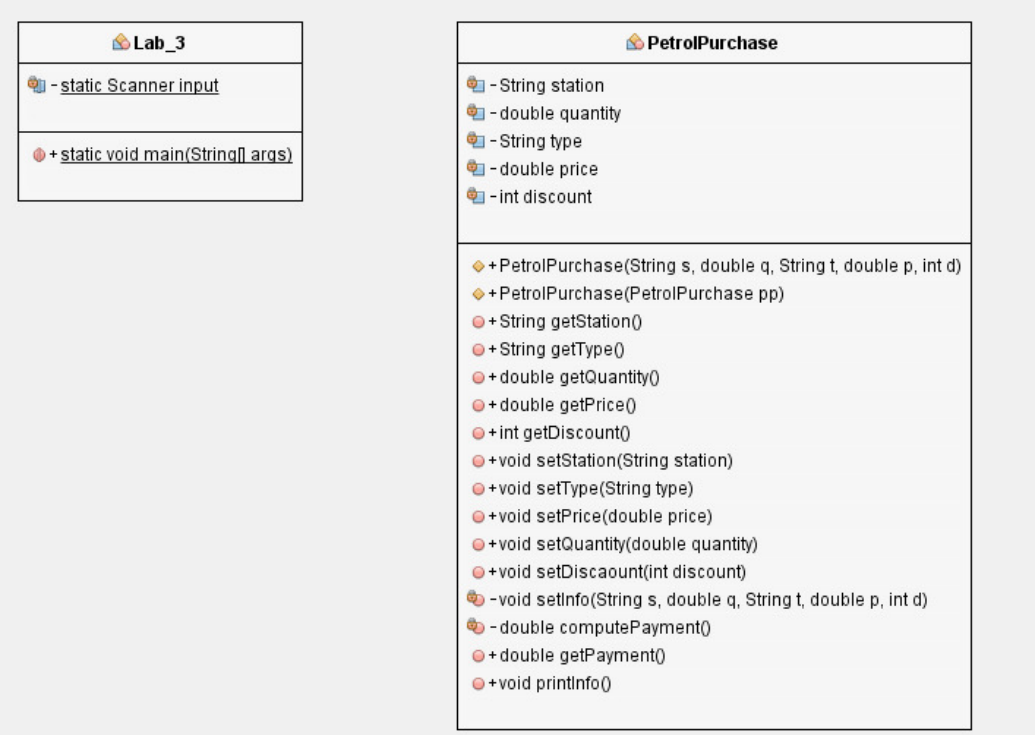
```
Enter addtional quantity of petrol: 15.5

Your new purchased price
Station: Bukit Timah
Total liter: 41.00
Petrol type: Super 99
Price per liter: 3.55
Actual cost: 145.55
Discount (15%): 21.83
Amount to pay: 123.72
```

The company usually give a duplicate copy to customer. Invoke the copy constructor to have this duplicate copy:

```
Duplicate the same object
Station: Bukit Timah
Total liter: 41.00
Petrol type: Super 99
Price per liter: 3.55
Actual cost: 145.55
Discount (15%): 21.83
Amount to pay: 123.72
```

The following shows the UML diagram of the two classes:



Usual programming practice must be respected:

- file header
- declarations
- indentations and alignment of statements
- avoid long statement
- comment statements
- well partition your screen to have clear interactions and displays.
- **use of other constructors to construct objects**
- etc

For printing, you can ONLY use `printf` method in this lab, i.e. `print` and `println` methods **are not allowed** in this lab.