

COSC 24L3: Lab Assignment #5
Computer Science Department @ Dallas Baptist University
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Create a class called **Invoice** that a hardware store might use to represent an invoice for an item sold at the store. An Invoice should include four pieces of information as instance variables

```
partNo: String      // part number
partDesc: String    // part description
quantity: int       // quantity of the item being purchased
price: double       // price per item
```

- Your class should have a no-arg constructor that initializes the four instance variables to some initial values, for example 0.
- Define a constructor with four parameters that initializes the four instance variables.
- **set** method for each instance variables. If the quantity is not positive, it should be set to 0. If the price per item is not positive, it should be set to 0.0.
- **get** method for each instance variables.
- In addition, provide a method named **getInvoiceAmount()** calculates the invoice amount, price * quantity.
- Write a test app named **InvoiceTest** that demonstrates class Invoice's capabilities.
 - The test program first uses no-arg constructor to create the first Invoice object, then ask the user to input the part number, part description, quantity, and item price. Use set methods to set the attributes values. Use get method to display the attributes values.
 - Ask the user to input the part number, part description, quantity, and item price, then use the constructor with four parameters to create the 2nd Invoice object. Use get method to display the attributes values.
 - Test your class with negative quantity and price values.

Sample run of the test program #1:

```
>>> Create first Invoice object <<<
```

```
>>> Ask for user input <<<
```

```
Part number: H123
```

```
Part Description: Hammer
```

```
Quantity: 5
```

```
Price per item: 8.5
```

```
>>> Display the First Invoice object <<<
```

```
Part number: H123
```

```
Description: Hammer
```

```
Quantity: 5
```

```
Price: 8.5
```

```
Invoice amount: 42.5
```

```
>>> Ask user input for the 2nd Invoice object <<<
```

```
Part number: P112
```

```
Part Description: Pliers
```

```
Quantity: 8
```

```
Price per item: 9.15
```

```
>>> Create the 2nd Invoice object <<<
```

```
>>> Display the First Invoice object <<<
```

```
Part number: P112
```

```
Description: Pliers
```

```
Quantity: 8
```

```
Price: 9.15
```

```
Invoice amount: 73.2
```

Sample run of the test program #2:

```
>>> Create first Invoice object <<<
```

```
>>> Ask for user input <<<
```

```
Part number: H123
```

```
Part Description: Hammer
```

```
Quantity: 9
```

```
Price per item: -8.5
```

```
>>> Display the First Invoice object <<<
```

```
Part number: H123
```

```
Description: Hammer
```

```
Quantity: 9
```

```
Price: 0.0
```

```
Invoice amount: 0.0
```

```
>>> Ask for user input for the 2nd Invoice object <<<
```

```
Part number: P122
```

```
Part Description: Pliers
```

```
Quantity: -20
```

```
Price per item: 9.5
```

```
>>> Create the 2nd Invoice object <<<
```

```
>>> Display the 2nd Invoice object <<<
```

```
Part number: P122
```

```
Description: Pliers
```

```
Quantity: 0
```

```
Price: 9.5
```

```
Invoice amount: 0.0
```