

CS 1073

FR03A

Assignment #2

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## Section 1

utensil1: Colour: Black

Type: Marker

Price: \$1.59

Total Sales Amount: \$0.0

utensil2: Colour: Grey

Type: Pencil

Price: \$0.49

Total Sales Amount: \$0.0

utensil3: Colour: Red

Type: Pen

Price: \$1.19

Total Sales Amount: \$0.0

## Section 2

/\*\*

This class represents a writing utensil for an art supply store.

@author Connor Wilson

@author Ethan McCarthy 3573807

\*/

```
public class WritingUtensil{
```

```
    //Instance variables
```

```
    //Contains colour of the utensil
```

```
    private String colour;
```

```
    //Contains the type of the utensil
```

```
    //For example: "Marker", "Pencil", or "Pen"
```

```
    private String type;
```

```
    //Contains the price of the utensil
```

```
    private double price;
```

```
    //The number of utensil units sold
```

```
    private int sold;
```

```
    //The brand of the utensil
```

```
    private String brand;
```

```
    //The constructor creates a new WritingUtensil object and initializes the
```

//instance variables.

```
public WritingUtensil(String colourIn, String typeIn, double priceIn, String brandIn){  
    colour = colourIn;  
    type = typeIn;  
    price = priceIn;  
    sold = 0; //Starts with zero sales  
    brand = brandIn;  
  
}
```

//This is a method that we can call on a WritingUtensil object

//(Specifically, it is an accessor method). This method

//creates and returns a String containing all the information

//about the state of the object.

```
public String toString(){  
    return "Colour: " + colour  
        + "\n\tType: " + type  
        + "\n\tPrice: $" + price  
        + "\n\tTotal Sales Amount: $" + (price * sold)  
        + "\n\tBrand: " + brand;  
  
}
```

//adds to the number of units sold when called on in the writingUtensilDriver program

```
public String recordUnitsSold(int soldIn){  
    sold += soldIn; //adds together all of the soldIn inputs to create a final number  
    return "";  
  
}
```

## Section 3

/\*\*

Example of a driver class.

This driver creates and tests WritingUtensil objects.

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\*/

public class WritingUtensilDriver {

public static void main (String[] args) {

//Creates 4 WritingUtensil objects

WritingUtensil utensil1 = new WritingUtensil("Black", "Marker", 1.59, "Hilroy");

WritingUtensil utensil2 = new WritingUtensil("Grey", "Pencil", 0.49, "Bic");

WritingUtensil utensil3 = new WritingUtensil("Red", "Pen", 1.19, "Paper Mate");

WritingUtensil utensil4 = new WritingUtensil("Pink", "Pen", 1.99, "Ardene");

//4 statements to add to the sold variable

System.out.println(utensil1.recordUnitsSold(15));

System.out.println(utensil2.recordUnitsSold(19));

System.out.println(utensil3.recordUnitsSold(25));

System.out.println(utensil1.recordUnitsSold(25));

//I can print my WritingUtensils to confirm they

//were created properly

System.out.println("utensil1: " + utensil1.toString());

```
System.out.println("utensil2: " + utensil2.toString());  
System.out.println("utensil3: " + utensil3.toString());  
System.out.println("utensil4: " + utensil4.toString());
```

```
}
```

```
}
```

## Section 4

utensil1: Colour: Black

Type: Marker

Price: \$1.59

Total Sales Amount: \$63.6

Brand: Hilroy

utensil2: Colour: Grey

Type: Pencil

Price: \$0.49

Total Sales Amount: \$9.31

Brand: Bic

utensil3: Colour: Red

Type: Pen

Price: \$1.19

Total Sales Amount: \$29.75

Brand: Paper Mate

utensil4: Colour: Pink

Type: Pen

Price: \$1.99

Total Sales Amount: \$0.0

Brand: Ardene