Credit
3120
Assignment
E3LunchOrder
Create a LunchOrder application that prompts the user for the number of hamburgers, salads, french fries, and sodas and then displays the total for the order.

How has your program changed from planning to coding to now? Please explain?

Creating constructors and overloaded constructor

```java
package mastery;

public class E3LunchOrder {

    private int hamburgers;
    private int salads;
    private int fries;
    private int sodas;


    public E3LunchOrder(){
        hamburgers = 0;
        salads = 0;
        fries = 0;
        sodas = 0;
    }

    public E3LunchOrder(int b, int s, int f, int so){
        hamburgers = b;
        salads = s;
        fries = f;
        sodas = so;
    }
```

Switching it up a little

```java
package mastery;

public class E3LunchOrder {

    private int hamburgers;
    private int salads;
    private int fries;
    private int sodas;
    private double price;
    private int fat;
    private int carb;
    private int fiber;


    public E3LunchOrder(){
        hamburgers = 0;
        salads = 0;
        fries = 0;
        sodas = 0;
    }

    public E3LunchOrder(double p, int fa, int c, int fi, int b, int sa, int fr, int so){
        price = p;
        fat = fa;
        carb = c;
        fiber = fi;
        hamburgers = b;
        salads = sa;
        fries = fr;
        sodas = so;
    }

```

```java
package mastery;

public class E3LunchOrder {

    private int hamburgers; //creates private variables
    private int salads;
    private int fries;
    private int sodas;
    private double price;
    private int fat;
    private int carb;
    private int fiber;


    public E3LunchOrder(){ //makes the starting number 0
        hamburgers = 0;
        salads = 0;
        fries = 0;
        sodas = 0;
    }

    public E3LunchOrder(double p, int fa, int c, int fi){ //to have multiple prices and values for each food type
        price = p;
        fat = fa;
        carb = c;
        fiber = fi;

    }

    public double showPrice() {//shows the price of which ever food type

        return(price);
    }



    public double totalPrice(int burgers,  int salads, int fries, int sodas, double burgersprice, double saladsprice, double friesprice, double sodasprice){
        double totalprice = (burgers * burgersprice) + (salads * saladsprice) + (fries * friesprice) + (sodas * sodasprice);

        return (totalprice);
    }
```

Pretty much redone it

Creating tester

```java
package mastery;

public class E3LunchOrderTest {
    public static void main(String[] args){

        E3LunchOrder hamburger = new E3LunchOrder(1.85, 9, 33, 1);
        E3LunchOrder salad = new E3LunchOrder(2.00, 1, 11, 5);
        E3LunchOrder fries = new E3LunchOrder(1.30, 11, 36, 4);
        E3LunchOrder soda = new E3LunchOrder(0.95, 0, 38, 0);
```

```
    }

    public E3LunchOrder(double p, int fa, int c, int fi){ //to have multiple prices and values for each food type
        price = p;
        fat = fa;
        carb = c;
        fiber = fi;

    }

    public double showPrice() {//shows the price of which ever food type

        return(price);
    }

public double showFat() {//shows the fat of which ever food type

        return(fat);
    }

public double showCarb() {//shows the carbs of which ever food type

    return(carb);
}

public double showFiber() {//shows the fiber of which ever food type

    return(fiber);
}
```

Methods to show the specific values

Adding stuff to tester

```
import java.util.Scanner;//imports scanner
public class E3LunchOrderTest {
    public static void main(String[] args){

        E3LunchOrder hamburger = new E3LunchOrder(1.85, 9, 33, 1); //creates the objects of foodtypes with different prices and foodvalues
        E3LunchOrder salad = new E3LunchOrder(2.00, 1, 11, 5);
        E3LunchOrder fries = new E3LunchOrder(1.30, 11, 36, 4);
        E3LunchOrder soda = new E3LunchOrder(0.95, 0, 38, 0);

        //defining varibles
        int selection;

        //creates scanner
        Scanner scanner = new Scanner(System.in);



        while (true) { //loop incase user enters wrong thing
            try {
                System.out.println("Enter number of hamburgers.");
                String strselection = scanner.nextLine();

                try { //so the code doesnt just break and end
                    selection = Integer.parseInt(strselection);
                } catch (Exception e) { //catches an error
                    System.out.println("Something went wrong. Please try again.");//tells user to try again
                    System.out.println("");//creates white space
                    continue;//restarts loop
                }
                System.out.println("Each hamburger has " + hamburger.showPrice());


            }catch (Exception e) { //catches an error
                System.out.println("Something went wrong. Please try again.");//tells user to try again
                System.out.println("");//creates white space
                continue;//restarts loop
            }
```

First loop of code finished

```
Scanner scanner = new Scanner(System.in);


while (true) { //loop incase user enters wrong thing
    try {
        System.out.println("Enter number of hamburgers.");
        String strselection = scanner.nextLine(); //accepts string from user

        try { //so the code doesnt just break and end
            selection = Integer.parseInt(strselection);
        } catch (Exception e) { //catches an error
            System.out.println("Something went wrong. Please try again.");//tells user to try again
            System.out.println("");//creates white space
            continue;//restarts loop
        }
        System.out.println("Each hamburger has " + hamburger.showFat() + "g of fat, " + hamburger.showCarb() + "g of carbs, and " + hamburger.showFiber() + "g of fiber.");
        Qburgers = selection; //gives value to the amount of burgers
        break;//breaks loop

    }catch (Exception e) { //catches an error
        System.out.println("Something went wrong. Please try again.");//tells user to try again
        System.out.println("");//creates white space
        continue;//restarts loop
    }
}
```

Duplicated it 4 times with different object names

```
        System.out.println("");//creates white space
        continue;//restarts loop
    }
}


    while (true) { //loop incase user enters wrong thing
        try {
            System.out.println("Enter number of salads.");
            String strselection = scanner.nextLine(); //accepts string from user

            try { //so the code doesnt just break and end
                selection = Integer.parseInt(strselection);
            } catch (Exception e) { //catches an error
                System.out.println("Something went wrong. Please try again.");//tells user to try again
                System.out.println("");//creates white space
                continue;//restarts loop
            }
            System.out.println("Each salad has " + salad.showFat() + "g of fat, " + salad.showCarb() + "g of carbs, and " + salad.showFiber() + "g of fiber.");
            Qsalads = selection; //gives value to the amount of salads
            break;//breaks loop

        }catch (Exception e) { //catches an error
            System.out.println("Something went wrong. Please try again.");//tells user to try again
            System.out.println("");//creates white space
            continue;//restarts loop
        }
    }


    while (true) { //loop incase user enters wrong thing
        try {
            System.out.println("Enter number of fries.");
            String strselection = scanner.nextLine(); //accepts string from user

            try { //so the code doesnt just break and end
                selection = Integer.parseInt(strselection);
            } catch (Exception e) { //catches an error
```

```
        while (true) { //loop incase user enters wrong thing
            try {
                System.out.println("Enter number of fries.");
                String strselection = scanner.nextLine(); //accepts string from user

                try { //so the code doesnt just break and end
                    selection = Integer.parseInt(strselection);
                } catch (Exception e) { //catches an error
                    System.out.println("Something went wrong. Please try again.");//tells user to try again
                    System.out.println("");//creates white space
                    continue;//restarts loop
                }
                System.out.println("Each fries has " + fries.showFat() + "g of fat, " + fries.showCarb() + "g of carbs, and " + fries.showFiber() + "g of fiber.");
                Qfries = selection; //gives value to the amount of fries
                break;//breaks loop

            }catch (Exception e) { //catches an error
                System.out.println("Something went wrong. Please try again.");//tells user to try again
                System.out.println("");//creates white space
                continue;//restarts loop
            }
        }

        while (true) { //loop incase user enters wrong thing
            try {
                System.out.println("Enter number of soda.");
                String strselection = scanner.nextLine(); //accepts string from user

                try { //so the code doesnt just break and end
                    selection = Integer.parseInt(strselection);
                } catch (Exception e) { //catches an error
                    System.out.println("Something went wrong. Please try again.");//tells user to try again
                    System.out.println("");//creates white space
                    continue;//restarts loop
                }
                System.out.println("Each soda has " + soda.showFat() + "g of fat, " + soda.showCarb() + "g of carbs, and " + soda.showFiber() + "g of fiber.");
                Qsoda = selection; //gives value to the amount of soda
                break;//breaks loop

            }catch (Exception e) { //catches an error
                System.out.println("Something went wrong. Please try again.");//tells user to try again
                System.out.println("");//creates white space
                continue;//restarts loop
            }
        }

        double totalCost = spot.totalPrice(Qburgers, Qsalads, Qfries, Qsoda, hamburger.showPrice(), salad.showPrice(), fries.showPrice(), soda.showPrice()); //runs method  totalprice t
```

```
            }catch (Exception e) { //catches an error
                System.out.println("Something went wrong. Please try again.");//tells user to try again
                System.out.println("");//creates white space
                continue;//restarts loop
            }
        }

        while (true) { //loop incase user enters wrong thing
            try {
                System.out.println("Enter number of soda.");
                String strselection = scanner.nextLine(); //accepts string from user

                try { //so the code doesnt just break and end
                    selection = Integer.parseInt(strselection);
                } catch (Exception e) { //catches an error
                    System.out.println("Something went wrong. Please try again.");//tells user to try again
                    System.out.println("");//creates white space
                    continue;//restarts loop
                }
                System.out.println("Each soda has " + soda.showFat() + "g of fat, " + soda.showCarb() + "g of carbs, and " + soda.showFiber() + "g of fiber.");
                Qsoda = selection; //gives value to the amount of soda
                break;//breaks loop

            }catch (Exception e) { //catches an error
                System.out.println("Something went wrong. Please try again.");//tells user to try again
                System.out.println("");//creates white space
                continue;//restarts loop
            }
        }

        double totalCost = spot.totalPrice(Qburgers, Qsalads, Qfries, Qsoda, hamburger.showPrice(), salad.showPrice(), fries.showPrice(), soda.showPrice()); //runs method  totalprice t
        System.out.println("Your order comes to: $" + totalCost); //prints final cost
```

And the final code

Rest of the class file

```
    private int carb;
    private int fiber;


    public E3LunchOrder(){ //makes the starting number 0
        hamburgers = 0;
        salads = 0;
        fries = 0;
        sodas = 0;
    }

    public E3LunchOrder(double p, int fa, int c, int fi){ //to have multiple prices and values for each food type
        price = p;
        fat = fa;
        carb = c;
        fiber = fi;

    }

    public double showPrice() {//shows the price of which ever food type

        return(price);
    }

    public double showFat() {//shows the fat of which ever food type

            return(fat);
        }

    public double showCarb() {//shows the carbs of which ever food type

        return(carb);
    }

    public double showFiber() {//shows the fiber of which ever food type

        return(fiber);
    }



    public double totalPrice(int burgers,  int salads, int fries, int sodas, double burgersprice, double saladsprice, double friesprice, double sodasprice){
        double totalprice = (burgers * burgersprice) + (salads * saladsprice) + (fries * friesprice) + (sodas * sodasprice);

        return (totalprice);
    }
```

Made it to round to nearst hundredth

```
public double totalPrice(int burgers,  int salads, int fries, int sodas, double burgersprice, double saladsprice, dou
    double totalprice = (burgers * burgersprice) + (salads * saladsprice) + (fries * friesprice) + (sodas * sodaspric
    String strtotalprice = (dc.format(totalprice));//rounds to nearest hundreth
    totalprice = Double.parseDouble(strtotalprice);//changes rounded totalprice from string back to double
    return (totalprice);//returns the total price of the order
}
```

Sometimes it gives a long decimal