
CP213 Fall 2015

Student name: _____ ID: _____

```
public enum PizzaSize {  
  
    small, medium, large  
}  
  
public class Pizza {  
    private final int COST_SMALL = 10, COST_MEDIUM = 12, COST_LARGE = 14;  
    private final int COST_TOPPING = 2; //toppings all have the same price  
    private PizzaSize size;  
  
    public Pizza(){  
        size = PizzaSize.medium;  
    }  
  
    public Pizza( PizzaSize size, int noCheeses, int noPeps, int noHams){  
        this.size = size;  
        noCheeseTops = noCheeses;  
        noPepTops = noPeps;  
        noHamTops = noHams;  
    } //end Pizza  
  
    public double calcCost(){  
        // You may assume codes are implemented here  
    } // calcCost  
  
    public String getDescription(){  
        String description = new String("pizza size: " + this.size + "\n" +  
            "no cheese toppings: " + this.noCheeseTops + "\n" +  
            "no pepperoni toppings: " + this.noPepTops + "\n" +  
            "no ham toppings: " + this.noHamTops + "\n" +  
            "cost: " + this.calcCost() + "\n");  
  
        return description;  
    } //getDescription  
  
} // Class Pizza
```

1. Assuming that you have an implementation of the class `Pizza` above, *write a segment of Java code to make two pizzas and print to the console the description of the pizza with the largest cost*

2. Define a class *SpecialPizza* that extends *Pizza*. Override the method *calcCost()* to charge, in addition to the cost of the pizza, an extra \$5 for delivery. Write the definition of class *SpecialPizza* below.

3. Consider the constructor for the class Pizza.

```
public Pizza( pizzaSize size, int noCheeses, int noPeps, int noHams) {  
    }  
}
```

Re-implement the constructor so that it throws a *PizzaTooBigException* if the total number of toppings (cheese + pepperoni + ham) is greater than 6.

(a) write code for *PizzaTooBigException*

(b) Re-implement the constructor so it may throw the *PizzaTooBigException*

(c) Write a segment of code to make a pizza and catch the possible *PizzaTooBigException*

