Assignment-2

1. Create a class named Pizza that stores information about a single pizza. It should contain the following:

- Private instance variables to store the size of the pizza (either small, medium, or large), the number of cheese toppings, the number of pepperoni toppings, and the number of beef toppings.
- Constructor(s) that set all of the instance variables.
- Public methods to get and set the instance variables.
- A public method named calcCost( ) that returns a double that is the cost of the pizza. Pizza cost is determined by:
  Small: $10 + $2 per topping
  Medium: $12 + $2 per topping
  Large: $14 + $2 per topping
- Public method named getDescription( ) that returns a String containing the pizza size, quantity of each topping.

Write test code to create several pizzas and output their descriptions. For example, a large pizza with one cheese, one pepperoni and two beef toppings should cost a total of $22. Now Create a PizzaOrder class that allows up to three pizzas to be saved in an order. Each pizza saved should be a Pizza object. Create a method calcTotal() that returns the cost of order. In the runner order two pizzas and return the total cost.

2. Define a class called Fraction. This class is used to represent a ratio of two integers. Create two constructors, set, get and display function. Include an additional method, equals, that takes as input another Fraction and returns true if the two fractions are identical and false if they are not.

3. Write a program that has variables to store Car data like; CarModel, CarName, CarPriceand CarOwner. The program should include functions to assign user defined values to the above mentioned variable and a display function to show the values. Write a main that calls these functions. Now write another Runner class that declares three Car objects and displays the data of all three.

4. Create Employee class with attributes employeeName, designation, joinYear to store employee name, designation and joining year in the company. Besides, attributes Employee class has a calculateJobLife method that calculates and returns the job life of an employee in the company. Employee class also has a superclass named Increment that has a calculateIncrement method with an argument jobLife which returns the increment of an employee by the job life. According to the rules of the company, an employee gets two increment in a year.
Now, design constructor, methods and instances in your code as per the requirements which will take the necessary data from user and will show the job life of an employee and increment of his job career in the company.