Independent Exercise:

Implement a class which models a game piece on a 2D grid.

Part A:

1. The data members will be *x* and *y* which will be private and of type integer.
2. Implement a default constructor setting *x* and *y* to 0.
3. Implement a method which returns the value of x
4. Implement a method which returns the value of y
5. Test all methods in the main function.

Part B:

1. Implement a non-default constructor which accepts two parameters which will ultimately set x and y to an initial position
2. Implement the methods up, down, left and right to modify the position of the game piece
3. Implement a method which calculates the distance of the current game piece to another game piece passed into the method
4. Test all methods in the main function

Class Exercise 10.2:

Generate a class which represents a bank that contains many employees. Use the code generated in exercise 9.2 to create the employee class, read in the file and print the employees. The class shall have the following Members:

1. Array of Employees, maximum of 10 (private)
2. Integer to track the number of employees
3. Method to print all employees
4. Method to read from a file and populate the employee array

What other methods should this class have to be complete?

Class Exercise 10.2:

Generate a class which represents a bank that contains many employees. Use the code generated in exercise 9.2 to create the employee class, read in the file and print the employees. The class shall have the following Members:

1. Array of Employees, maximum of 10 (private)
2. Integer to track the number of employees
3. Method to print all employees
4. Constructor to initialize the bank class
5. Method to read from a file and populate the employee array
6. Method to write from to a file the employee information
7. Method to add an employee
8. Method to remove an employee
9. Method to set the hours an employee worked
10. Method to set the wage of an employees
11. Method to calculate labor cost

A menu to interact with the class.