Programming Assignment 3- 2D Arrays

Due 11:59 pm September 26th

Part 1:

This programming project is not in your textbook

Suppose the weekly hours for all employees are stored in a two-dimensional array. Each row records an employee’s seven-day work hours with seven columns. For example, the following array stores the work hours for eight employees. Write a program that displays employees and their total hours in decreasing order of the total hours.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Sun | Mon | Tue | Wed | Th | Fr | Sa |
| Employee 0 | 2 | 4 | 3 | 4 | 5 | 8 | 8 |
| Employee 1 | 7 | 3 | 4 | 3 | 3 | 4 | 4 |
| Employee 2 | 3 | 3 | 4 | 3 | 3 | 2 | 2 |
| Employee 3 | 9 | 3 | 4 | 7 | 3 | 4 | 1 |
| Employee 4 | 3 | 5 | 4 | 3 | 6 | 3 | 8 |
| Employee 5 | 3 | 4 | 4 | 6 | 3 | 4 | 4 |
| Employee 6 | 3 | 7 | 4 | 8 | 3 | 8 | 4 |
| Employee 7 | 6 | 3 | 5 | 9 | 2 | 7 | 9 |

Part 2:

Programming Project 6, page 579 in textbook

Define a class called TicTacToe. An object of type TicTacToe is a single game of tic-tac-toe. Store the game board as a single two-dimensional array of base type char that has three rows and three columns. Include methods to add a move, to display the board, to tell whose turn it is (X or O), to tell whether there is a winner, to say who the winner is, and to reinitialize the game to the beginning. Write a main method for the class that will allow two players to enter their moves in turn at the same keyboard.

Instructions

1. You are to submit the \*.java text file in a folder named proj3*LastName*
2. Name your java programs “EmployeeHours.java”, and “TicTacToe.java”