

## Review for Midterm

### Part 1

1. Create a class Person(Name).
2. Create a class Employee which is a subclass of Person.

Employee class should have an array for the hours worked per week (from Monday to Friday), as shown in the following table:

Name	Monday	Tuesday	Wednesday	Thursday	Friday	Gross_pay(\$)
John	5	3	8	7	8	341
Sally	2	1	5	6	8	242
Harold	8	5	3	8	8	352
						<b>935</b>

3. Define a constant HOURLY\_RATE equals to \$11.00 in the Employee class
4. Create a method to calculate the GrossPay, the signature should be:  
`public double getGrossPay()`
5. Create a class method to calculate the payment of all employees, the signature should be:  
`public static double getTotalGrossPay(Employee[] employees)`
6. Create an EmployeeDemo to instantiate the classes and calculate and print the salary per employee.

### Part 2

Write the Java code that corresponds to each question:

1. Suppose you have a two-dimensional array named salary with 25 rows and 12 columns, the data type of the array is double. The salary array contains the salary of 25 employees in 12 months.
  - a. Write the necessary code to print the highest value in the salary array (3 marks)
  - b. Write the necessary code to print the sum of each row of the salary array, one row per line (3 marks).
  - c. Write the necessary code to print the sum of the second column of the salary array (3 marks).

## Part 3

1. Write class **MyApp**, create a method **mySum** that receives as parameter a 2D array, the method computes the alternating (per row) sum of all elements in an array. For example if **mySum** is called with an array like this  $\{\{2,6,0\},\{6,2,0\}\}$  then it will return the sum of  $2 - 6 + 0 + 6 - 2 + 0$