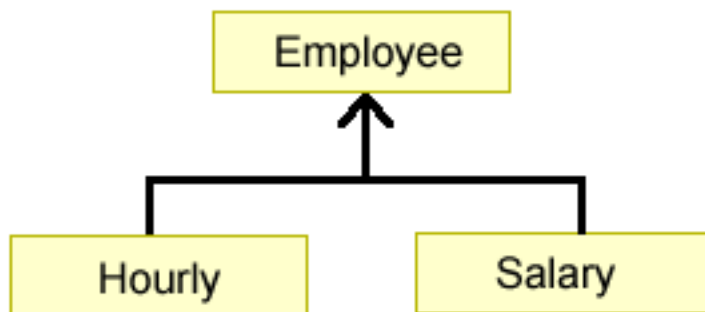


Wages

Workspace: Wages

Directions

A company hires its employees as either hourly or salary workers. A set of classes is used to handle the different types of employees at the company. The class hierarchy is shown in the following diagram.



The class **Employee** is specified as an abstract class as shown in the following declaration.

```
public abstract class Employee
{
    // instance variables
    private String name;
    private String ssNum;

    // constructor
    public Employee(String n, String s)
    {
        name = n;
        ssNum = s;
    }

    public String getName()
    {
        return name;
    }

    public String getSSNum()
    {
        return ssNum;
    }

    // returns an employee's monthly salary
    public abstract double getSalary();
}
```

Each employee has a name and social security number. Two additional classes are used to represent the two types of employees and are described in the table below.

Class	Description
Hourly	Hourly employees are paid by the hour. The monthly salary is calculated by multiplying the number of hours worked each month by the hourly rate. Hourly workers are also paid time and a half for any work done beyond 160 hours a month (40 hours x 4 weeks).
Salary	Salary employees are paid a yearly salary. The monthly salary is calculated by dividing the yearly salary by 12 (12 months). Salary employees are not paid overtime.

Modifications

1. Salary Class

Write the complete class declaration for the class Salary. Include all necessary instance variables and implementations of its constructor and method(s). The constructor should take three parameters that indicate the employee's name, social security number, and yearly salary. Implement the method getSalary so that it calculates and returns the monthly salary as described above.

2. Hourly Class

Write the complete class declaration for the class Hourly. Include all necessary instance variables and implementations of its constructor and method(s). The constructor should take four parameters that indicate the employee's name, social security number, hourly wage, and hours worked for month. Implement the method getSalary so that it calculates and returns the monthly salary as described above.