

Systems Development: Object Oriented Programming

(H171 35)

Case Study: Payroll system using polymorphism

Step 2 – create concrete derived class SalariedEmployee

* SalariedEmployee extends Employee base class
* Class SalariedEmployee additionally includes a private instance variable to store the weekly salary (weeklySalary) and a *property* set accessor which ensures that we only assign non-negative values to weeklySalary
* Class SalariedEmployee includes a constructor that takes the first name, last name, a social security number and a weekly salary as arguments. Remember to call the base class (Employee) constructor and pass the first name, last name and social security number
* Class SalariedEmployee overrides methods Earning and ToString:
  + Earnings – overrides Employee’s abstract method Earnings to provide a concrete implementation that returns the SalariedEmployee’s weekly salary
  + ToString – overrides Employee’s version. Returns “salaried employee:” , followed by the base class Employee specific information (i.e. first name, last name and social security number) obtained by invoking the base class’s ToString, then the employee’s weekly salary, obtained by using the class’s WeeklySalary property.