

Systems Development: Object Oriented Programming

(H171 35)

Case Study: Payroll system using polymorphism

Step 5 – create indirect concrete derived class BasePlusCommissionEmployee

* BasePlusCommissionEmployee extends CommissionEmployee class and is therefore an indirect derived class of class Employee
* Class BasePlusCommissionEmployee additionally includes a private instance variable to store the base salary (baseSalary) and a *property* which validates that baseSalary is not negative
* Class BasePlusCommissionEmployee includes a constructor that takes the first name, last name, a social security number, sales, commission rate and base salary as arguments. Remember to call the base class (CommissionEmployee) constructor and pass the first name, last name, social security number, sales and commission rate
* Class BasePlusCommissionEmployee overrides methods Earning and ToString:
  + Earnings – overrides CommissionEmployee’s method Earnings to calculate the BasePlusCommissionEmployee’s earnings by calling the base class (CommissionEmployee) Earnings and adding on the base salary
  + ToString – overrides CommissionEmployee’s version. Returns “base-salaried:” , followed by the base class CommissionEmployee specific information (i.e. first name, last name and social security number) obtained by invoking the base class’s ToString, then the employee’s base salary.