//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// SalariedEmployee.java

//

// For secure coding laboratory exercise which addresses

// potential vulnerabilities in extensibility through inheritance

//

// This type of employee can accrue comp time (in whole hours only).

// At the end of the year, // a bonus of one month's salary is paid

// if compTime > 200 hours

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

public class SalariedEmployee extends EmployeePayInfo

{

private int compTime; ✓

//-----------------------------------------------------------------

// Constructor: Establishes pay information for a salaried employee

// Primarily uses the EmployeePayInfo parent data/constructor

//-----------------------------------------------------------------

public SalariedEmployee (String firstName, String lastName, String officeAddress,

String officePhone, String socialSecurityNumber, double payRate) V4 ✓ P

{ super (firstName V5, lastName V5, officeAddress V5, officePhone V5, socialSecurityNumber V5,

payRate V5);

compTime = 0;

}

//-----------------------------------------------------------------

// Add hours to compTime

//-----------------------------------------------------------------

public void addCompHours (int moreHours) V3 V4 ✓ P

{ compTime += moreHours; }

//-----------------------------------------------------------------

// Get comp hours

//-----------------------------------------------------------------

public double getCompHours() V2 V4 ✓

{ return compTime; }

//-----------------------------------------------------------------

// Calculates and returns the pay for a salaried employee

//-----------------------------------------------------------------

public double pay() V2 V4 ✓

{ return payRate; }

//-----------------------------------------------------------------

// Calculates and returns comp time pay (the same as one month's pay)

// This is only done once a year. Once paid, the hours are zeroed.

//-----------------------------------------------------------------

public double payCompTime() V4

{ double paidTime = 0.0;

if (compTime >= 200) paidTime = pay();

payRate = 0.0;

return paidTime; }

}