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

// Employee.java

//

// For secure coding laboratory exercise which addresses

// potential vulnerabilities in extensibility through inheritance

//

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

public class Employee

{

protected String firstName; V1

protected String lastName; V1

protected String officeAddress; V1

protected String officePhone; V1

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

// Constructor: Establishes basic information for an employee

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

public Employee (String firstName, String lastName, String officeAddress,

String officePhone) V4 ✓ P

{

this.firstName = firstName V5;

this.lastName = lastName V5;

this.officeAddress = officeAddress V5;

this.officePhone = officePhone V5;

}

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

// Accessor and mutator methods for data members

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

~~public void setFirstName(String firstName)~~ V3 V4 ✓ P

{ this.firstName = firstName V5; }

~~public void setLastName(String lastName)~~ V3 V4 ✓ P

{ this.lastName = lastName V5; }

~~public void setOfficeAddress(String officeAddress)~~ V3 V4 ✓ P

{ this.officeAddress = officeAddress V5; }

~~public void setOfficePhone(String officePhone)~~ V3 V4 ✓ P

{ this.officePhone = officePhone V5; }

public String getFirstName() V2 V4 ✓

{ return firstName; }

public String getLastName() V2 V4 ✓

{ return lastName; }

public String getOfficeAddress() V2 V4 ✓

{ return officeAddress; }

public String getOfficePhone() V2 V4 ✓

{ return officePhone; }

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

// Returns a string based upon an employee's basic information

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

public String toString() V4

{

String result = "Name: " + firstName + " " + lastName + "\n";

result += "Address: " + officeAddress + "\n";

result += "Phone: " + officePhone;

return result;

}

}