Name Period

Skill 25.2: Exercise 1		
Declare a class called BankAccount. Then declare another class called SavingsAccount which inherits		
BankAccount.		

Skill 25.3: Exercise 1

- (a) Write the BankAccount constructor. The constructor should accept two parameters (A double which represents a balance, and a Sting which represents a name). The parameters should be assigned to private variables balance and name.
- (b) Write the SavingsAccount constructor. The constructor should include the necessary parameters to invoke the BankAccount constructor. It should also accept a third parameter which represents the interest rate. The interest rate parameter should be assigned to the private variable interestRate;

```
interest rate parameter should be assigned to the private variable interestRate;
private double balance;
private String name;

private String name;
private double interestRate;
```

Skill 25.4: Exercise 1

The methods below exist in the BankAccount class. The addInterest method in the savings account class, calculates the interest earned, then deposits the interest in the bank account. Complete the addInterest method.

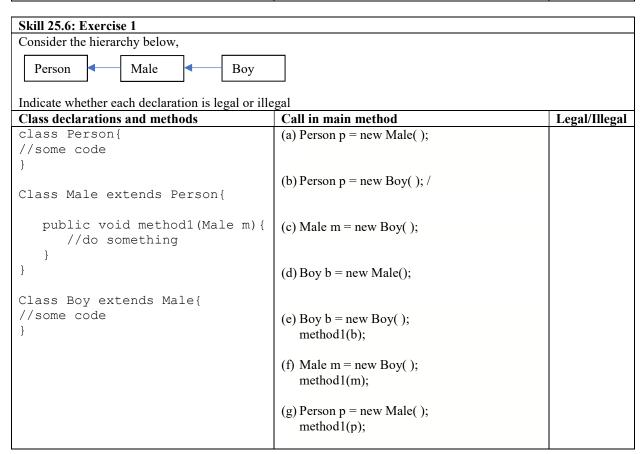
```
/* Returns the balance in the bank account */
public double getBalance() {
    return balance;
}

/* deposits money in the bank account */
public void deposit(double d) {
    deposit += d;
}

public void addInterest() {
```

Name

Skill 25.5: Exercise 1			
Consider the following classes and declarations. Indicate whether each declaration is legal or illegal			
Class declarations	Call in main method	Legal/Illegal	
<pre>class Bicycle{ //some code }</pre>	<pre>(a) Bicycle myBike1 = new Bicycle();</pre>		
Class MountainBike extends Bicycle{	<pre>(b) Bicycle myBike2 = new DownhillBike();</pre>		
<pre>//some code }</pre>	<pre>(c) MountainBike myBike3 = new DownhillBike();</pre>		
<pre>Class DownhillBike extends MountainBike{ //some code</pre>	<pre>(d) MountainBike myBike4 = new Bicycle();</pre>		
Class CrossCountryBike extends	<pre>(e) DownhillBike myBike5 = new CrossCountryBike();</pre>		
<pre>MountainBike{ //some code }</pre>	<pre>(f) CrossCountryBike() myBike6 = new MountainBike();</pre>		



AP Computer Science A Ticket Out the Door Set 25: Inheritance

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