**Classes: Basics**

1. Modify the class to add a isTails method that returns true when the value is not heads.

public class Coin

{

// constant to represent heads

private static int HEADS = 1;

// current value of the coin

private int value = 0;

// method to randomly set the value of the coin to heads or tails

public void flip()

{

if (Math.random() < 0.5)

{

value = 0;

}

else

{

value = 1;

}

}

// return true if the value is heads or false otherwise

public boolean isHeads()

{

return value == HEADS;

}

// convert the value to a string

public String toString()

{

if (value == HEADS) return "Heads";

else return "Tails";

}

**public boolean isTails()**

**{**

**return value == TAILS;**

**}**

// test the class

public static void main(String[] args)

{

Coin myCoin = new Coin();

for (int i = 0; i < 10; i++)

{

myCoin.flip();

System.out.println(myCoin);

System.out.println(myCoin.isHeads());

**System.out.println(myCoin.isTails());**

}

}

}

2. Modify the code below to add more constructors. Also modify the main method to test the new constructors.

public class Person

{

// fields

private String name;

private String email;

private String phoneNumber;

// constructor

public Person(String theName)

{

this.name = theName;

}

**public Person(String theName, String email, String phoneNumber)**

**{**

**this.name = theName;**

**this.email = email;**

**this.phoneNumber = phoneNumber;**

**}**

// methods - getters

public String getName() { return this.name;}

public String getEmail() { return this.email;}

public String getPhoneNumber() { return this.phoneNumber;}

// methods - setters

public void setName(String theName) { this.name = theName;}

public void setEmail(String theEmail) {this.email = theEmail;}

public void setPhoneNumber(String thePhoneNumber) { this.phoneNumber = thePhoneNumber;}

public String toString()

{

return this.name + " " + this.email + " " + this.phoneNumber;

}

// main method for testing

public static void main(String[] args)

{

Person p1 = new Person("Sana");

System.out.println(p1);

Person p2 = new Person("Jean");

p2.setEmail("jean@gmail.com");

p2.setPhoneNumber("404 899-9955");

System.out.println(p2);

**Person p3 = new Person("Riya”, “**[**riya@gmail.com**](mailto:riya@gmail.com)**”, “123-123-1234”);**

**System.out.println(p3);**

}

}

3. package pack1;

**public** class A

{

public A()

{

//public constructor

}

}

package pack2;

import pack1.\*;

class B

{

A a = new A(); //Compile Time Error

}

Check if compile time error exists. If yes, correct the code to remove the error.

**Solution**: Just make the class A public.