This assignment is to work with new objects associated with mammals. You are provided classes & sub classes to begin with, attached to the assignment (MainWeek5.java, Mammal.java, Cat.java, and Dog.java.

Create the following *Mammal* sub-classes (in the package week5):

-Cow (in a file called Cow.java)
-Sheep (in a file called Sheep.java)
-Fox (in a file called Fox.java)

Also, create a sub-class from *Dog*, called

-Chihuahua (in a file called Chihuahua.java)

There is also a method called *trySwimming* in the main method to complete.

When these particular mammals speak, they say the following:

Cow: "Moo"

Sheep: "Baa"

Chihuahua: "Yip"

Now, since we all want to know what the fox says, make the *Speak* method for the fox take user input after prompted. Prompt the user "What does the fox say?", and output whatever they type, followed by an exclamation point (!).

Also, for the *Cow* class, create a special method called *Milk*, which returns a random integer between 2 and 5. This number will be used to represent the number of gallons of milk a *Cow* can produce.

The *Main* class also includes a private method called *trySwimming*. *trySwimming* takes a *Mammal* object as an input parameter. For the *trySwimming* method:

-If the *Mammal* is a *Dog* (could be a *Chihuahua*) or *Fox*, then output the term "Splash, paddle paddle" then *Speak* once.

- If the *Mammal* is a *Cat*, output "hiss" (not *Speak*).

-If the *Mammal* is a *Cow* or *Sheep*, then simply call *Speak* once.

The code for *Mammal*.java, *Cat*.java, *Dog*.java, and starting code for *MainWeek5*.java are provided. Note. MainWeek5 code will not work until the new classes are added:

```
package week5;
public abstract class Mammal{
	public abstract void Speak();
}

package week5;
public class Cat extends Mammal{
	public void Speak(){
		System.out.println("Meow");
	}
}

package week5;
public class Dog extends Mammal{
	public void Speak(){
		System.out.println("Woof");
	}

}

package week5;
public class MainWeek5{
	public static void main(String[] args){
	//Main Method... DO NOT CHANGE THIS METHOD
		Cat kitty = new Cat();
		Dog puppy = new Dog();
		Chihuahua buffy = new Chihuahua();
		Cow bessie = new Cow();
		Sheep aSheep = new Sheep();
		Fox littleFox = new Fox();
		kitty.Speak();
		puppy.Speak();
		buffy.Speak();
		bessie.Speak();
		aSheep.Speak();
		littleFox.Speak();
		System.out.println("The cow produces " + bessie.Milk() + " Gallons today.");
		trySwimming(puppy);
		trySwimming(buffy);
		trySwimming(kitty);
		trySwimming(bessie);
		trySwimming(aSheep);
		trySwimming(littleFox);
	}
	private static void trySwimming(Mammal currentMammal){
		//Insert swimming code here.
	}
}
```

After completing the requirements, the output when running *MainWeek5* should look like this (assuming user input prompt responses are the same):

```
Meow
Woof
Yip
Moo
Baa
What does the fox say? Ring-ding-ding-ding-dingeringeding
Ring-ding-ding-ding-dingeringeding!
The cow produces 3 Gallons today.
Splash, paddle paddle Woof
Splash, paddle paddle Yip
hiss
Moo
Baa
Splash, paddle paddle What does the fox say? Wa-pa-pa-pa-pa-pa-pow
Wa-pa-pa-pa-pa-pa-pow!
Press any key to continue . . .
```

Submit in the usual manner, ONLY the following code files:

Cow.java

Sheep.java

Chihuahua.java

Fox.java

Updated MainWeek5.java code with trySwimming method code

Note: to keep it simple, please stick to this list above ONLY.