

**CIS 255 - Java Programming**  
**Homework #13**  
**Interfaces**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Given the following Animal interface, answer the questions that follow.**

```
public interface Animal {  
    public String type();  
    public String sound();  
}
```

- 1. Write a Java class Cow that that implements the Animal interface. Add the member variables for type and sound. Create the default constructor method which sets the member variable type to be "cow" and the member variable sound = "moo". Handle the sound() and type() methods as intended.**
- 2. Write a Java class Chicken that that implements the Animal interface. Add the member variables for type and sound. Create the default constructor method which sets the member variable type to be "chicken" and the member variable sound = "cluck". Handle the sound() and type() methods as intended.**
- 3. Write a Java class Pig that that implements the Animal interface. Add the member variables for type and sound. Create the default constructor method which sets the member variable type to be "pig" and the member variable sound = "oink". Handle the sound() and type() methods as intended.**
- 4. Write the Java class HmWk13 to test the classes that implement the Animal interface. HmWk12 should create at least 1 Cow object, 1 Chicken object, and 1 Pig object. Each animal should be stored into an Animal List object after creating. Afterward loop through the list and execute the interface methods sound() and type().**