

Sample Solution --- Lecture 2.1 Programming Exercise

```
public abstract class Animal
{
    public abstract void display();
}

public abstract class Dog extends Animal
{
    public abstract void bark();
}

public class Chihuahua extends Dog
{
    public void bark()
    {
        System.out.println( "\n Yo quiero Taco Bell" );
    }

    public void display()
    {
        System.out.println( "\n Displaying Chihuahua" );
    }
}

public class EnglishSpaniel extends Dog
{
    public void bark()
    {
        System.out.println( "\n I say old chap...I'm
                             rather English" );
    }

    public void display()
    {
        System.out.println( "\n Displaying Spaniel" );
    }
}
```

```

public class FrenchPoodle extends Dog
{
    public void bark()
    {
        System.out.println( "\n Bonjour mon ami" );
    }

    public void display()
    {
        System.out.println( "\n Displaying Poodle" );
    }
}

public class AbstractClassExercise
{
    public static void main( String [] args )
    {
        Dog aChihuahua = new Chihuahua();
        Dog aSpaniel = new EnglishSpaniel();
        Dog aPoodle = new FrenchPoodle();

        aChihuahua.bark();
        aChihuahua.display();

        aSpaniel.bark();
        aSpaniel.display();

        aPoodle.bark();
        aPoodle.display();
    }
}

```