INHERITANCE

```java
package javaapplication1;


/**
 *
 *
 */
import java.util.*;
public class JavaApplication1 {
    public static void main(String[] args){
        Mamals obj = new Mamals();
        obj.cat();
        obj.Dog1();
        obj.Dog2();
    }
}


class Animal{
    Animal(){
    String name = "Animals-->Mamals";
    System.out.println(name);
    }
}
class Mamals extends Animal{
    void cat(){
        System.out.println("Meow");
    }
    void Dog1(){
        System.out.println("Woof");
    }
    void Dog2(){
```

```java
        System.out.println("Woooof");

    }

}
```

// SHAPE

package javaapplication2;

```java
/**
 *
 *
 */
import java.util.*;
public class JavaApplication2 {
    public static void main(String[] args) {
        circle c = new circle(5.0);
        rectangle r = new rectangle(5.0,2.0);
        System.out.println("Area of Circle: "+c.calculateArea());
        System.out.println("Area of Rectangle: "+r.calculateArea());
    }
}
class shape{
    double claculateArea(){
        return 0.0;
    }
}
class circle extends shape{
    private double radius;
    circle(double radius){
```

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            this.radius = radius;
        }
        double calculateArea(){
            return Math.PI*radius*radius;
        }
        public String tostring(){
            return "Area of Circle: "+calculateArea();
        }
    }
class rectangle extends shape{
        private double length;
        private double width;
        rectangle(double length,double width){
            this.length = length;
            this.width = width;
        }
        double calculateArea(){
            return length*width;
        }
        public String tostring(){
            return "Area of Rectangle: "+calculateArea();
        }
    }
```