```java
class Shape{
    public void Area(){
        System.out.println("area diff shapes");
    }
}
class Circle extends Shape{
    int r;
    double pi;
    public void Area(int e,double pr){
        System.out.println("area of circle"+2*pi*r);
    }
}
class Rectangle extends Shape{
    int l,b;
    public void Area (int l,int b){
        System.out.println("area of rec"+l*b);
    }
}
class Main{
    public static void main(String[] args){
        Shape s = new Shape();
```

input

```
area diff shapes
area of circle0.0
area of rec12


...Program finished with exit code 0
```

```
8       double pi;
9       public void Area(int e,double pr){
10          System.out.println("area of circle"+2*pi*r);
11      }
12  }
13  class Rectangle extends Shape{
14      int l,b;
15      public void Area (int l,int b){
16          System.out.println("area of rec"+l*b);
17      }
18  }
19  class Main{
20      public static void main(String[] args){
21          Shape s = new Shape();
22          s.Area();
23          Circle c = new Circle();
24          c.Area(3,3.14);
25          Rectangle r = new Rectangle();
26          r.Area(3,4);
27      }
28  }
```

input

```
rea diff shapes
rea of circle0.0
area of rec12


...Program finished with exit code 0
```

Main.java

```java
class Parent{
    void display(){
        System.out.println("This is the parent class");
    }
    void show(int num){
        System.out.println("The number in the parent class is:"+num);
    }
}
class Child extends Parent{
    void display(){
        System.out.println("This is the child class");
    }
    void show (double num){
        System.out.println("The number in the child is:"+num);
    }
}
public class Main{
    public static void main(String[]args){
        Parent parentObj = new Parent();
        Child childObj = new Child();
        parentObj.show(5);
```

input

```
This is the parent class
This is the child class


...Program finished with exit code 0
Press ENTER to exit console.
```

Main.java

```
6           System.out.println("The number in the parent class is:"+n
7       }
8   }
9   class Child extends Parent{
10      void display(){
11          System.out.println("This is the child class");
12      }
13      void show (double num){
14          System.out.println("The number in the child is:"+num);
15      }
16  }
17  public class Main{
18      public static void main(String[]args){
19          Parent parentObj = new Parent();
20          Child childObj = new Child();
21          parentObj.show(5);
22          childObj.show(7.5);
23          parentObj.display();
24          childObj.display();
25      }
26  }
```

input

```
This is the parent class
This is the child class


...Program finished with exit code 0
Press ENTER to exit console.
```

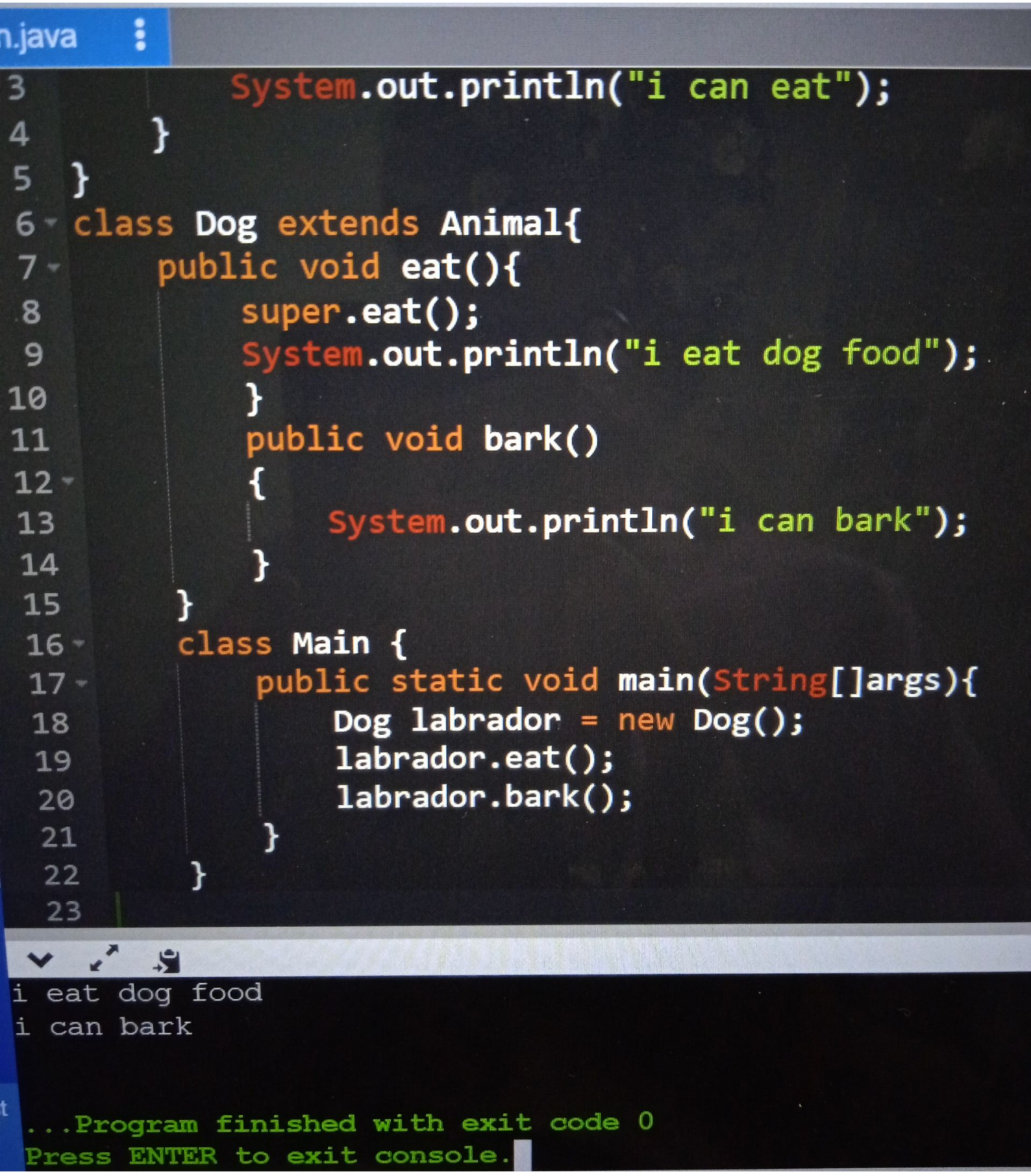
Main.java

```java
class Animal{
    public void eat(){
        System.out.println("i can eat");
    }
}
class Dog extends Animal{
    public void eat(){
        super.eat();
        System.out.println("i eat dog food");
        }
        public void bark()
        {
            System.out.println("i can bark");
        }
    }
    class Main {
        public static void main(String[]args){
            Dog labrador = new Dog();
            labrador.eat();
            labrador.bark();
        }
```

input

```
i eat dog food
i can bark


...Program finished with exit code 0
Press ENTER to exit console.
```


n.java
System.out.println("i can eat");
}
}
class Dog extends Animal{
public void eat(){
super.eat();
System.out.println("i eat dog food");
}
public void bark()
{
System.out.println("i can bark");
}
}
class Main {
public static void main(String[]args){
Dog labrador = new Dog();
labrador.eat();
labrador.bark();
}
}
i eat dog food
i can bark
...Program finished with exit code 0
Press ENTER to exit console.

```java
class FinalDemo{
    public final void display(){
        System.out.println("This is a final method.");
    }
}
class Main extends FinalDemo{
    public final void Display(){
        System.out.println("The final methods is overridden.");
    }
    public static void main (String[]args){
        Main obj = new Main ();
    }
}
```

input

```
...Program finished with exit code 0
Press ENTER to exit console.
```