

```

1 class Shape{
2     public void Area(){
3         System.out.println("area diff shapes");
4     }
5 }
6 class Circle extends Shape{
7     int r;
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();

```

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

```

area diff shapes
area of circle0.0
area of rec12

```

...Program finished with exit code 0


```
1 class Parent{
2     void display(){
3         System.out.println("This is the parent class");
4     }
5     void show(int num){
6         System.out.println("The number in the parent class is:"+num);
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);
```

input

This is the parent class
This is the child class

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


```
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

```
1 class Animal{
2     public void eat(){
3         System.out.println("i can eat");
4     }
5 }
6 class Dog extends Animal{
7     public void eat(){
8         super.eat();
9         System.out.println("i eat dog food");
10    }
11    public void bark()
12    {
13        System.out.println("i can bark");
14    }
15 }
16 class Main {
17     public static void main(String[] args){
18         Dog labrador = new Dog();
19         labrador.eat();
20         labrador.bark();
21     }
```

input

i eat dog food
i can bark

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

n.java

```
3      System.out.println("i can eat");
4  }
5  }
6  class Dog extends Animal{
7      public void eat(){
8          super.eat();
9          System.out.println("i eat dog food");
10     }
11     public void bark()
12     {
13         System.out.println("i can bark");
14     }
15 }
16 class Main {
17     public static void main(String[]args){
18         Dog labrador = new Dog();
19         labrador.eat();
20         labrador.bark();
21     }
22 }
23
```

i eat dog food
i can bark

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


```

1 class Main{
2     public static void Main(String[]args){
3         final int AGE = 32;
4         class A extends Main {
5             public static void main(String[]args){
6                 Main m = new Main();{
7                     m.AGE = 35;
8                 }
9             }
10        }
11    }
12 }

```

input

Compilation failed due to following error(s).

```

public static void main(String[]args){
    ^

```

modifier 'static' is only allowed in constant variable declarations

2 errors


```
1 class FinalDemo{
2     public final void display(){
3         System.out.println("This is a final method.");
4     }
5 }
6 class Main extends FinalDemo{
7     public final void Display(){
8         System.out.println("The final methods is overridden.");
9     }
10    public static void main (String[]args){
11        Main obj = new Main ();
12    }
13 }
```

input

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