

```
class A {  
    A () {  
        System.out.println ("Construct A");  
    }  
}  
class B extends A {  
    B () {  
        System.out.println ("Construct B");  
    }  
}  
class C extends B {  
    C () {  
        System.out.println ("Construct C");  
    }  
}  
class CallingCons {  
    public static void main(String args[]) {  
        C c = new C () ;  
    }  
}
```

Result:  
Construct A  
Construct B  
Construct C

```
class A {  
    int i, j;  
    A(int a, int b) {  
        i = a;  
        j = b;  
    }  
    void show () {  
        System.out.println("i & j: " + i + " " + j);  
    }  
}
```

```
class B extends A {  
    int k;  
    B(int a, int b, int c) {  
        super (a, b);  
        k = c;  
    }  
    void show () {  
        System.out.println("k: " + k);  
    }  
}
```

```
class Override {  
    public static void main(String args[]) {  
        B subOb = new B(1, 2, 3);  
        subOb.show();  
    }  
}
```

Result:  
k: 3

```

class A {
    int i, j;
    A(int a, int b) {
        i = a;
        j = b;
    }
    void show () {
        System.out.println("i & j: " + i + " " + j);
    }
}

```

```

class B extends A {
    int k;
    B(int a, int b, int c) {
        super (a, b);
        k = c;
    }
    void show () {
        super.show ();
        System.out.println("k: " + k);
    }
}

```

```

class Override {
    public static void main(String args[]) {
        B subOb = new B(1, 2, 3);
        subOb.show();
    }
}

```

Result:  
i & j: 1 2  
k: 3

```

class A {
    int i, j;
    A(int a, int b) {
        i = a;
        j = b;
    }
    void show () {
        System.out.println("i & j: " + i + " " + j);
    }
}

class B extends A {
    int k;
    B(int a, int b, int c) {
        super (a, b);
        k = c;
    }
    void show (String msg) {
        System.out.println(msg + k);
    }
}

class Override {
    public static void main(String args[]) {
        B subOb = new B(1, 2, 3);
        subOb.show("This is k ");
        subOb.show();
    }
}

```

Result:

This is k 3  
i & j: 1 2

```
// Динамическая диспечеризация методов
class A {
    void callMe() {
        System.out.println ("InSide A");
    }
}
class B extends A {
    void callMe () {
        System.out.println ("InSide B");
    }
}
class C extends B {
    void callMe () {
        System.out.println ("InSide C");
    }
}
class CallingMe {
    public static void main(String args[]) {
        A a = new A ();
        B b = new B ();
        C c = new C () ;
        A r;
        r = a;
        r.callMe();
        r = b;
        r.callMe();
        r = c;
        r.callMe();
    }
}
```

Result:  
InSide A  
InSide B  
InSide C

```

class Figure {
    double dim1;
    double dim2;
    Figure(double a, double b) {
        dim1 = a;
        dim2 = b;
    }
    double area () {
        System.out.println ("Ай донт андеРстенд");
        return 0;
    }
}
class Rectangle extends Figure {
    Rectangle(double a, double b) {
        super (a, b);
    }
    double area () {
        System.out.println("Rectangle ");
        return dim1 * dim2;
    }
}
class Triangle extends Figure {
    Triangle(double a, double b) {
        super (a, b);
    }
    double area () {
        System.out.println("Triangle ");
        return dim1 * dim2 / 2;
    }
}
class FindAreas {
    public static void main(String args[]) {
        Figure f = new Figure(10, 10);
        Rectangle r = new Rectangle(9, 5);
        Triangle t = new Triangle(10, 8);
        Figure figref;
        figref = r;
        System.out.println ("Figure = " + figref.area());
        figref = t;
        System.out.println ("Figure = " + figref.area());
        figref = f;
        System.out.println ("Figure = " + figref.area());
    }
}

```

Result:  
 Rectangle  
 Figure = 45.0  
 Triangle  
 Figure = 40.0  
 Ай донт андеРстенд  
 Figure = 0.0