JAVA类的继承与多态

Shape接口类：

**public** **interface** Shape {

**public** **void** printf();

}

BaseShape抽象类：

**public** **abstract** **class** BaseShape **implements** Shape{

**public** **double** zhouchang;

**public** **double** area;

**public** **abstract** **void** zhouchang();

**public** **abstract** **void** area();

}

Trangle三角形类：

**public** **class** Trangle **extends** BaseShape{

**public** **double** di;

**public** **double** right;

**public** **double** left;

**public** **boolean** foo;

**public** Trangle(**double** a,**double** b,**double** c){

di = a;

right = b;

left = c;

}

**public** **void** zhouchang(){

zhouchang = di + right + left;

}

**public** **void** area(){

area = Math.*sqrt*((zhouchang/2)\*(zhouchang/2-di)\*(zhouchang/2-right)\*(zhouchang/2-left));

}

**public** **boolean** isFoo(){

**if**((di + right) < left || (di + left) < right || (left +right) < di){

foo = **false**;

**return** foo;

}

**return** **true**;

}

**public** **void** printf(){

System.***out***.print("底边是:");

System.***out***.print(di);

System.***out***.print("左边是:");

System.***out***.print(right);

System.***out***.print("右边是:");

System.***out***.print(left);

System.***out***.print("周长:");

System.***out***.print(zhouchang);

System.***out***.print("面积:");

System.***out***.println(area);

}

}

Lader梯形类：

**public** **class** Lader **extends** BaseShape{

**public** **double** di;

**public** **double** right;

**public** **double** left;

**public** **double** shang;

**public** **double** h;

**public** Lader(**double** a,**double** b,**double** c,**double** d,**double** e){

di = a;

right = b;

left = c;

shang = d;

h = e;

}

**public** **void** zhouchang(){

zhouchang = di + right + left + shang;

}

**public** **void** area(){

area = (di + right)\*h/2;

}

**public** **void** printf(){

System.***out***.print("底边是:");

System.***out***.print(di);

System.***out***.print("左边是:");

System.***out***.print(right);

System.***out***.print("右边是:");

System.***out***.print(left);

System.***out***.print("上边是:");

System.***out***.print(shang);

System.***out***.print("周长:");

System.***out***.print(zhouchang);

System.***out***.print("面积:");

System.***out***.println(area);

}

}

Circle圆类：

**public** **class** Circle **extends** BaseShape{

**public** **double** r;

**public** Circle(**double** a){

r = a;

}

**public** **void** zhouchang(){

zhouchang = 2\*r\*3.14;

}

**public** **void** area(){

area = r\*r\*3.14;

}

**public** **void** printf(){

System.***out***.print("半径是:");

System.***out***.print(r);

System.***out***.print("周长:");

System.***out***.print(zhouchang);

System.***out***.print("面积:");

System.***out***.println(area);

}

}

Test测试类：

**public** **class** Test{

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

Circle c1 = **new** Circle(2.0);

c1.zhouchang();

c1.area();

c1.printf();

Trangle t1 = **new** Trangle(2.0,2.0,5.0);

**if**(t1.isFoo()){

t1.zhouchang();

t1.area();

t1.printf();

}**else**{

System.***out***.println("不能构成一个三角形");

}

Lader L1 = **new** Lader(3.0,2.0,2.0,4.0,2.2);

L1.area();

L1.zhouchang();

L1.printf();

}

}



