import java.util.\*;

abstract class shape{

int i;

int j;

int r;

shape(int a, int b){

i=a;

j=b;

}

shape(int r){

this.r=r;

}

abstract void printarea();

// System.out.println("Abstract method");

}

class rectangle extends shape{

rectangle(int a, int b){

super(a,b);

}

void printarea(){

double area=i\*j;

System.out.println("Area of rectangle is: "+area);

}

}

class triangle extends shape{

triangle(int a, int b){

super(a,b);

}

void printarea(){

double area=i\*j/2;

System.out.println("Area of triabgle is: "+area);

}

}

class circle extends shape{

circle(int r){

super(r);

}

void printarea(){

double area=3.14\*r\*r;

System.out.println("Area of circle is: "+area);

}

}

class lab4\_abstract{

public static void main(String args[]){

// shape s = new shape();

rectangle rec = new rectangle(5,7);

triangle tri = new triangle(5,6);

circle cir = new circle(2);

shape r;

// r=s;

// r.printarea();

r=rec;

r.printarea();

r=tri;

r.printarea();

r=cir;

r.printarea();

}

}

output:

