**Write a java program to demonstrate the method overriding.**

class Shapes

{

double dim1;

double dim2;

Shapes(double a, double b)

{

dim1 = a;

dim2 = b;

}

double area()

{

System.out.println("Area for Shapes is undefined.");

return 0;

}

}

class Rectangle extends Shapes

{

Rectangle(double a, double b)

{

super(a, b);

}

double area()

{

System.out.println("Inside Area for Rectangle.");

return dim1 \* dim2;

}

}

class Triangle extends Shapes

{

Triangle(double a, double b)

{

super(a, b);

}

double area()

{

System.out.println("Inside Area for Triangle.");

return dim1 \* dim2 / 2;

}

}

class FindAreas

{

public static void main(String args[])

{

Shapes f = new Shapes(10, 10);

Rectangle r = new Rectangle(9, 5);

Triangle t = new Triangle(10, 8);

Shapes figref;

figref = r;

System.out.println("Area is " + figref.area());

figref = t;

System.out.println("Area is " + figref.area());

figref = f;

System.out.println("Area is " + figref.area());

}

}

**Output:**

Inside Area for Rectangle.

Area is 45

Inside Area for Triangle.

Area is 40

Area for Shapes is undefined.

Area is 0