Program-1

```java
class Shape
 {
    double x;
    Shape(double a)
      {
         x=a;
        }
}
class Rectangle extends Shape
 {
   double y;
   Rectangle(double a,double b)
    {
     super(a);
     y=b;
     }
void area(double x,double y)
 {
System.out.println("Area of rectangle:"+
(x*y));
 }
}
class Square extends Shape
 {
  Square(double a)
   {
```

```java
   super(a);
      }
void area(double x)
 {
  System.out.println("Area of square:"+(x*x));
 }
}
class Circle extends Shape
 {
  Circle(double a)
   {
  super(a);
}
void area(double x)
 {
 System.out.println("Area of
circle:"+(3.14*x*x));
  }
}
```

```java
class Area
 {
public static void main(String ar[])
{
Rectangle r=new Rectangle(4,5);
Square s=new Square(4);
Circle c=new Circle(5);
Shape ref;
ref=r;
r.area(4,5);
ref=s;
s.area(4);
ref=c;
c.area(5);
}
```

Output:-

Area of rectangle:20.0
Area of square:16.0
Area of circle:78.5