## Exercise-4

```
import java.util.*; abstract
class Shapes{ double a,b;
abstract void printArea();
}
class Rectangle extends Shapes
void printArea()
{
System.out.println("\t\tCalculating Area of Rectangle");
Scanner input=new Scanner(System.in);
System.out.print(" Enter length: ");
a=input.nextDouble();
System.out.print("\nEnter breadth: ");
b=input.nextDouble(); double area=a*b;
System.out.println("Area of Rectangle: "+ area);
} }
class Triangle extends Shapes
{
void printArea()
{
System.out.println("\t\tCalculating Area of Triangle");
Scanner input=new Scanner(System.in);
System.out.print("Enter height: ");
a=input.nextDouble();
System.out.print("\nEnter breadth: ");
b=input.nextDouble(); double
area=0.5*a*b;
System.out.println("Area of Triangle: "+ area);
} }
class Circle extends Shapes
{
void printArea()
```

```
{
System.out.println("\t\tCalculating Area of Circle");
Scanner input=new Scanner(System.in);
System.out.print("Enter radius: ");
a=input.nextDouble(); double
area=3.14*a*a;
System.out.println("Area of Circle: "+area);
} }
class AbstractClass
public static void main(String[] args)
{ Shapes obj;
obj=new Rectangle();
obj.printArea();
obj=new Triangle();
obj.printArea();
obj=new Circle();
obj.printArea();
}
```