```
abstract class Shape{
double dim1, dim2;
Shape(double d1, double d2){
dim1=d1;
dim2=d2;
abstract double print area();
}
class Rectangle extends Shape{
Rectangle(double d1, double d2){
super(d1,d2);
double print_area(){
return dim1*dim2;
class Triangle extends Shape{
Triangle(double d1, double d2){
super(d1,d2);
double print area(){
return (dim1*dim2)/2;
}
class Circle extends Shape{
Circle(double d1, double d2){
super(d1,d2);
double print_area(){
return 3.14*dim1*dim1;
class Demo{
public static void main(String args[]){
Rectangle r=new Rectangle(5,10);
Triangle t=new Triangle(5,10);
Circle c= new Circle (5,5);
Shape s;
s=r;
System out println/"the area of rectangle is: "is print area()).
```

import java.util.Scanner;

```
double print_area(){
  return 3.14*dim1*dim1;
}
}
class Demo{
  public static void main(String args[]){
  Rectangle r=new Rectangle(5,10);
  Triangle t=new Triangle(5,10);
  Circle c= new Circle (5,5);
  Shape s;
  s=r;
  System.out.println("the area of rectangle is:"+s.print_area());
  s=t;
  System.out.println("the area of triangle is:"+s.print_area());
  s=c;
  System.out.println("the area of circle is:"+s.print_area());
}
```

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>javac Demo.java

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>java Demo

the area of rectangle is:50.0

the area of triangle is:25.0 the area of circle is:78.5

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>_

```
> Using Abstract to overside methods [LAB-4]
   "unport jova, utd. Scanner;
    abstruct clay Shape of
      double dim, dim2;
      Shape (double ds, double de) {
           dim = d1;
           dimz=dz;
         abstract double print anal);
        class Rectangle extends Shape (
         Rectangle (double d1, double d2) {
            Super (ds, dz);
          double print_aua(){
           return dim 1 * dim 2;
        clay tringhe extends Shape f
         Triangle (double d1, double d2){
              Super (d1, d2);
          double print_acea () 4
           utum (dim 1 * dim 2)/2;
```

```
class Circle extends Shape &
  Circle (double d1, double d2) {
   Super (d1,d2);
                                     wy the second to be
   double print_aceal) {
    etum 3.14 * dim1 * dim2;
                         met lys mains
   clan Demoh
    public static void main (String args [ ]) {
         Reitaugle & = new Reitaugle (5,10) &;
          Triangle t = new tollangle (5,10);
           Circle c= new Circle (5,8);
                           ( ) within so a prink
            Shape s;
          S=8() boo and paintler l'The and of Rectangle:+5. print and (1);
   System out printler ("The area of triangle: + s. print areal);
  S=C;
System. out. println(" The area of Circle: +S. print-area (1);
  Out put: -
   The area of Rectangl: 50.0
   The area of triangle: 25.0
   The and of circle: 78.5
```

- burrary cut I also it is subject