```
abstract class Shape {
    int d1, d2;

    Shape (int a, int b) {
        d1 = a;
        d2 = b;
    }
    abstract void printArea();
}

class Circle extends Shape {

    Circle (int radius) {
        super (radius, 0)
    }

    @override
    void printArea() {
        System.out.print("area (circle) = " + (Math.PI * d1 * d1));
    }

}
```

Date: / /

```
class Rectangle extends Shape {

    Rectangle (int l, int b) {
        super(l, b);
    }

    @ override
      void printArea() {
        System.out.print("Area(rectangle) = "+(d1*d2));
      }
}

class Triangle extends Shape {

    Triangle (int h, int b) {
        super(h, b);
    }

    @ override
      void printArea(){
        System.out.print("Area(triangle) = "+(0.5 * d1*d2));
      }

}
```

```
public static void main (String[] args) {

    Shape rectangle = new Rectangle (1, 2);
    Shape circle    = new Circle (1);
    Shape triangle  = new Triangle (2, 1);

    rectangle.printArea();
    circle.printArea();
    triangle.printArea();

}
```

O/P:

```
Area(rectangle) = 2
Area(circle) = 3.141593
Area(triangle) = 1
```

Eg: 22,10 Take the input from user