Exercise 1

A `Point` object instance represents a Cartesian coordinate and thus has two member variables, `x` and `y`. The Java program `Distance` below instantiates two `Point` object instances to represent the coordinates (4, 5) and (11, 4). The program then displays the distance between the two coordinates by invoking the `distance()` method in the `distance()` method.

```
C:\> java Distance
Distance = 7.0710678118654755
```

```
public class Distance {
    public static void main(String [] args) {
        Point p1 = new Point(4, 5);
        Point p2 = new Point(11, 4);
        System.out.println("Distance = " + p1.distance(p2));
    }
}
```

Complete the `Point` class.

```
public class Point {
    private int x;
    private int y;

    public Point() {
        this(0, 0);
    }

    public Point(int x, int y) {
        setPoint(x, y);
    }
    public void setPoint(int x, int y) {
       if (x>=0 && y>=0) {
       this.x = x;
    this.y = y;
        }
    }

    public int getX() { return x; }
    }
```



```
    public int getY() { return y; }
    }
```

```
    public double distance(Point p) {
            return Math.sqrt(
            (x-p.getX())*(x-p.getX())+
            (y-p.getY())*(y-p.getY())
// COMPLETE THIS METHOD
    }
}
```

END.