## **MyRectangle**

```
-topLeft: MyPoint
-bottomRight: MyPoint
+MyRectangle(p1: MyPoint, p2: MyPoint)
+MyRectangle(x1: int, y1: int, x2: int, y2: int)
+getTopLeft(): MyPoint
+getTopLeftX(): int
+getTopLeftY(): int
+getTopLeftXY(): int[2]
+getBottomRight(): MyPoint
+getBottomRightX(): int
+getBottomRightY(): int
+getBottomRightXY(): int[2]
+getBottomLeft(): MyPoint
+getBottomLeftX(): int
+getBottomLeftY(): int
+getBottomLeftXY(): int[2]
+getTopRight(): MyPoint
+getTopRightX(): int
+getTopRightY(): int
+getTopRightXY(): int[2]
+setTopLeft(topLeft: MyPoint): boolean
+setTopLeftX(x: int): boolean
+setTopLeftY(y: int): boolean
+setTopLeftXY(x: int, y: int): boolean
+setBottomRight(bottomRight: MyPoint): boolean
+setBottomRightX(x: int): boolean
+setBottomRightY(y: int): boolean
+setBottomRightXY(x: int, y: int): boolean
+setBottomLeft(bottomLeft: MyPoint): boolean
+setBottomLeftX(x: int): boolean
+setBottomLeftY(y: int): boolean
+setBottomLeftXY(x: int, y: int): boolean
+setTopRight(topRight: MyPoint): boolean
+setTopRightX(x: int): boolean
+setTopRightY(y: int): boolean
+setTopRightXY(x: int, y: int): boolean
+setAllRectanglePoints(p1: MyPoint, p2: MyPoint)
+setAllRectanglePoints(x1: int, y1: int, x2: int, y2: int)
+getVertices(): MyPoint[4]
+getWidth(): int
+getHeight(): int
+getArea(): int
+getPerimeter(): int
+getCenterX(): double
+getCenterY(): double
+getCenterXY(): double[2]
+getDiagonalLength(): double
+contains(p: MyPoint): boolean
+contains(x: int, y: int): boolean
+translate(dx: int, dy: int)
+toString(): String
```

## MyPoint +MyPoint(x: int, y: int) +MyPoint(p: MyPoint) +getX(): int +getXY(): int[2] +setX(x: int)

+setY(y: int) +setXY(x: int, y: int) +distance(): double

+distance(p: MyPoint): double +distance(x: int, y: int): double

+toString(): String

-x: int

+MyPoint()

+getY(): int

-y: int