**LineMain**

**Directions:**

1. Instantiate a new Line, l1, with endpoints (0,0) and (2,2).
2. Instantiate a new Line, l2, with endpoints (0,2) and (2,0).
3. Print l1.
4. Print l2.
5. Print the boolean that describes if l1 is perpendicular to l2.
6. Print the boolean that describes if l1 is parallel to l2.
7. Modify ONLY the y-coordinate of the second point in line 1 by using the mutator method from the Point class and assign it a new y-value of -2.
8. Print the second point of line 1.
9. Print the new slope of line 1.
10. Print the boolean that describes if l1 is perpendicular to l2.
11. Print the boolean that describes if l1 is parallel to l2.

**Correct Printout:**

Line 1:

Line starts at (0.0, 0.0) and ends at (2.0, 2.0)

Length: 2.828

Slope: 1.0

Line 2:

Line starts at (0.0, 2.0) and ends at (2.0, 0.0)

Length: 2.828

Slope: -1.0

Line 1 Perpendicular to Line 2: true

Line 1 Parallel to Line 2: false

Point 2 of Line 1 has been changed to: (2.0, -2.0)

And now has a slope of: -1.0

Line 1 Perpendicular to Line 2: false

Line 1 Parallel to Line 2: true