Exercise: Write your own algorithm to solve the maze.

You've tweaked several algorithms so far; it's time to practice what you've learned and write your own algorithm from scratch.

To complete this puzzle, you'll need to follow the path, moving to each switch and then deciding whether to turn left or right. Try to identify a pattern in the puzzle that lets you know which way to turn.

1 Walk through pseudocode in your mind for how to toggle the six switches and reach the gem.

2 Write out your code, testing and adjusting your algorithm as necessary.

```
//Function to Navigate the path to gem while activating switches
 along the way

func navPath() {
    if isBlockedLeft && isBlockedRight || isBlockedRight &&
     !isBlockedLeft {
        moveForward()
    }
    if isBlocked && isOnClosedSwitch {
        turnLeft()
        toggleSwitch()
        moveForward()
    }
    if isOnClosedSwitch && !isBlockedLeft && !isBlockedRight {
        turnRight()
        toggleSwitch()
        moveForward()
    }
    if isOnClosedSwitch && !isBlockedRight {
        turnLeft()
        toggleSwitch()
        moveForward()
    }
}
```

```
// While Loop to Excute the navPath Function, Collect the Gem at the
  end and stop the loop

while !isOnGem {
    navPath()
    if isOnGem {
        collectGem()
        break
    }
}
```