

**Goal:** Use the NOT operator to adjust your character's path when there's no gem on a tile.

The **logical NOT operator (!)** changes the value of a **Boolean** to its opposite—it *inverts* the value.

For example, if the condition `isBlocked` is *false*, then `!isBlocked` is *true*.

Run the puzzle a few times to see what changes. Notice that there are always four gems, but one is at the bottom of a stairway. When there's no gem on the top platform, the stairs extend from that tile.

Use `!` to determine when your character is NOT on a gem. If not on a gem, turn and collect the gem at the end of the stairs. Otherwise, collect the gem.

---

```
// Movement Function with for loop
func program() {
    func turnAround() {
        turnLeft()
        turnLeft()
    }
    func stairs() {
        moveForward()
        moveForward()
    }
    for i in 1 ... 4 {
        moveForward()
        if isOnGem {
            collectGem()
        }
        else if !isOnGem {
            turnLeft()
            stairs()
            collectGem()
            turnAround()
            stairs()
            turnLeft()
        }
        else if isBlocked {
```

```
        turnLeft()  
    }  
}  
}  
// Solve Challenge  
program()
```