

Challenge: Use logical operators and conditional code to move through the puzzle world.

Each of these operators influences the way your conditional code runs:

- The **NOT operator (!)** inverts a **Boolean** value, saying, "If NOT this condition, do this."
- The **AND operator (&&)** combines two conditions and runs the code only if *both* are true.
- The **OR operator (||)** combines two conditions and runs the code if *at least* one is true.

Solve the challenge by choosing the operators and conditions that will work best to collect all the gems and toggle open the switches.

```
// Movement Functions
func stairs() {
    moveForward()
    moveForward()
}
func turnAround() {
    turnLeft()
    turnLeft()
}

func solve() {
for i in 1 ... 22{
    if isOnGem && isOnClosedSwitch {
        collectGem()
        toggleSwitch()
        turnRight()
        stairs()
        collectGem()
        turnAround()
        stairs()
        turnRight()
    }
    else if isOnClosedSwitch && !isOnGem {
        toggleSwitch()
        turnLeft()
    }
}
```

```
    }  
    else if !isOnClosedSwitch && isOnGem {  
        collectGem()  
    }  
    else if !isBlocked {  
        moveForward()  
    }  
}  
}
```

```
// Solve Challenge  
solve()
```