Challenge: Collect exactly three gems and toggle open four switches.

To collect the right number of gems and toggle open the right number of switches in this challenge, you'll need two separate variables. As your character handles the gems and switches, you'll increment the right variable so you stop at the right time.

Start by declaring one variable for the number of gems, and another for the number of switches. Use the guidelines below to name your variables.

> Naming a variable
>
> **Use camelCase**: Start with a lowercase letter on the first word, and capitalize each new word.
> **Use a descriptive name**: Give the variable a name that tells you what it stores, like `numberOfCats`.

Increment each variable by `1` when you collect a gem or toggle a switch. Use one of the comparison operators below to create a condition in an `if` statement or `while` loop to tell your character when to stop.

> More comparison operators
>
> **Less than operator:** (`a < b`) returns `true` if `a` is less than `b`.
> **Greater than operator:** (`a > b`) returns `true` if `a` is greater than `b`.
> **Equal to operator:** (`a == b`) returns `true` if `a` equals `b`.
> **Not equal to operator:** (`a != b`) returns `true` if `a` is not equal to `b`.

```
var numberOfGems = 0
var numberOfOpenSwitches = 0

while numberOfGems < 3 {
    if isOnGem {
        collectGem()
        numberOfGems = numberOfGems + 1
    }else if isBlockedRight && isBlocked {
        turnLeft()
    }else if !isBlocked {
        moveForward()
    }else if isBlocked {
        turnRight()
    }
}
```

```
while numberOfOpenSwitches < 4 {
    if isOnClosedSwitch {
        toggleSwitch()
        numberOfOpenSwitches = numberOfOpenSwitches + 1
    }else if isBlockedRight && isBlocked {
        turnLeft()
    }else if !isBlocked {
        moveForward()
    }else if isBlocked {
        turnRight()
    }
}
```