Challenge: Use randomization to generate a unique world.

What if you want to use random values in your `heights` array to create a unique landscape each time you run your code?

The `randomInt` function generates a random integer using the values that you pass in. In the code below, `localNumber` is defined inside the `for` loop. Each time the loop runs, a new number is generated and appended to `heights`.

Example

```
for i in 1...20 {
   let localNumber = randomInt(from: 0, to: 12)
   heights.append(localNumber)
}
```

A variable defined inside a code structure like a function or a loop is called a local variable. Like `localNumber` above, a local variable exists *only* inside the code structure it's defined in. It can't be used anywhere else in the code.

For this challenge, use the `randomInt` function, along with your knowledge of arrays and conditional code, to generate a unique landscape each time your code runs. Be creative, and have fun!

```
let allCoordinates = world.allPossibleCoordinates
var heights: [Int] = []

    var character = Character(name: .byte)

// Append random numbers to heights.
    for i in 1...20 {
        let localNumber = randomInt(from: 0, to: 14)
        heights.append(localNumber)
    }
var index = 0
for coordinate in allCoordinates {
    if index == heights.count {
        index = 0
    }

    // currentHeight stores the height at the current index.
```

```
    var currentHeight = heights[index]


    if currentHeight == 0 {
        // Do something interesting if currentHeight is equal to 0.
        if currentHeight == 0 {
            world.place(Character(), facing: north, atColumn: 3, row:
             4)
        }

    } else {
        for i in 1...currentHeight {
            world.place(Block(), at: coordinate)
        }
        if currentHeight > 10 {
            // Do something different, such as placing a character.
            var character = Character(name: .blu)
            world.place(Character(), facing: north, atColumn: 4, row:
             7)
        } else if coordinate.column >= 3 && coordinate.column < 6 {
            // Do something different, such as placing water.
            world.place(Gem(), atColumn: 3, row: 8)
        }
        // Add more rules to customize your world.


    }
    index += 1

}
```