

Challenge: Build an island surrounded by a sea.

Tired of being landlocked? Use code to create your very own island!

First, create two empty **arrays** that each store an array of coordinates. One will store coordinates for the *island*, and the other will store coordinates for the *sea*.

Next, write a set of conditions within your **if statement** to append coordinates to your island array. These coordinates should be in the center of the map, and might be a 3x3 or 4x4 block. Append any coordinates that don't meet these conditions to your sea array.

Adding water

To add water, remove existing blocks first.

```
world.removeAllBlocks(at: coordinate)
world.place(Water(), at: coordinate)
```

After you've appended coordinates to each array, place blocks for each coordinate in the island array, and water for coordinates in the sea array. Good luck!

```
let allCoordinates = world.allPossibleCoordinates
// Create two empty arrays of type [Coordinate].
var island: [Coordinate] = []
var sea: [Coordinate] = []

for coordinate in allCoordinates {
    if coordinate.column > 3 && coordinate.column < 7 && coordinate.row >
        3 && coordinate.row < 7 {
        // Append to island array.
        island.append(coordinate)
    } else {
        // Append to sea array.
        sea.append(coordinate)
    }
}

// For your island array, place blocks.
for coordinate in island {
    world.place(Block(), at: coordinate)
}

// For your sea array, place water.
```

```
for coordinate in sea{  
  world.removeItem(at: coordinate)  
  world.place(Water(), at:coordinate)  
}
```