

LEARN TO CODE 2

ISLAND BUILDER

Island Builder

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

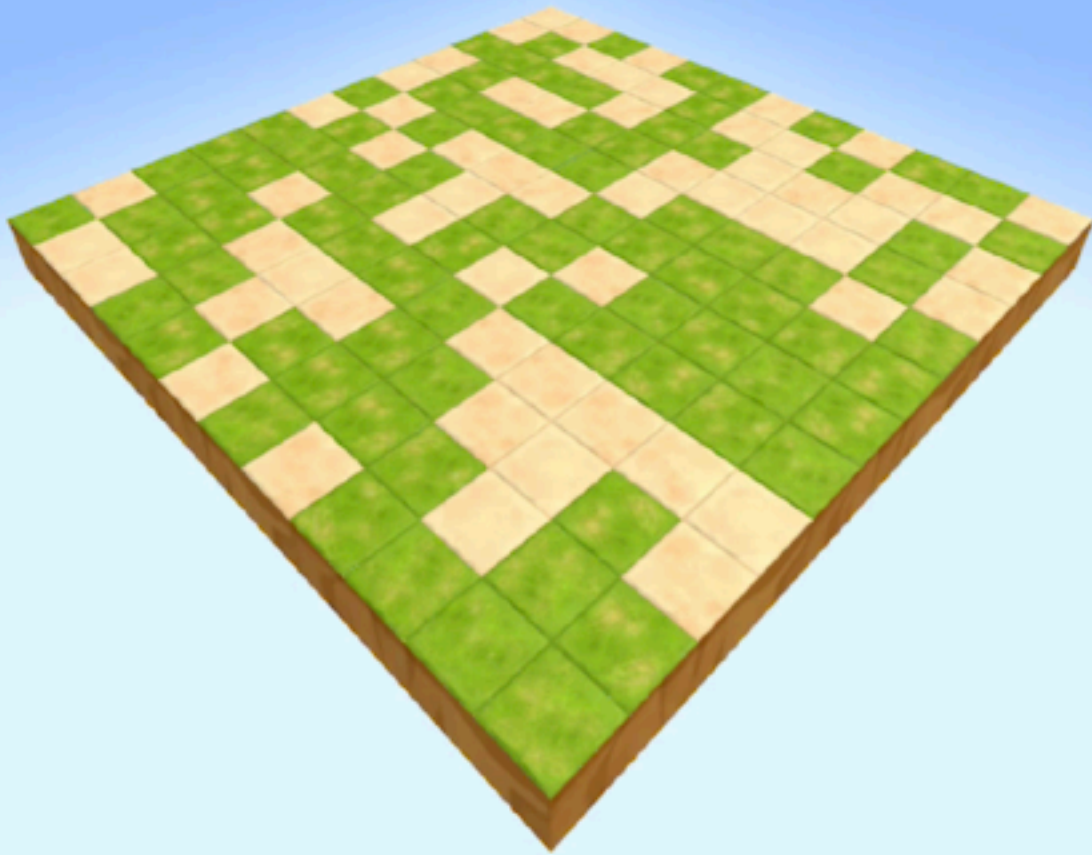
To add water, remove existing items first.

```
world.removeItem(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].

for coordinate in allCoordinates {
  if condition {
```



Run My Code

Hint

ISLAND BUILDER

CASE 1

