Swift Coding – World Building Cheat Sheet

THE BASICS

```
//Placing a block at the coordinates – column 5 and row 6
world.place(Block(), at: Coordinate(column: 5, row: 6))

//Placing a Gem at the coordinates – column 5 and row 6
world.place(Gem(), at: Coordinate(column: 5, row: 6))

//Placing a Switch at the coordinates – column 5 and row 6
world.place(Switch(), at: Coordinate(column: 5, row: 6))

//Placing a Switch at the coordinates – column 5 and row 6
world.place(Stair(), facing: south, at: Coordinate(column: 5, row: 6))

//Remove a block at coordinate – column 5 and row 6
world.removeBlock(at: Coordinate(column: 5, row: 6))

//Using a character
//Initialising your character – this example is Expert()
let expert = Expert()
//Place your character at the coordinates – column 5 and row 6
world.place(expert, facing: north, at: Coordinate(column: 5, row: 6))
```

A LITTLE MORE TRICKY

```
//Including Portals
//Initialising your portal, example – greenPortal
let greenPortal = Portal(color: 🟩)
//Place your start portal at the coordinates – column 1 and row 7
//Place your end portal at the coordinates – column 5 and row 4
world.place(greenPortal, atStartColumn:1, startRow:7, atEndColumn: 5,
endRow: 4)

//Including Locks – remember only the Expert() can turn locks up or down
//Initialising your lock, example – greenLock
let greenLock = PlatformLock(color: 🟩)
//Place your lock at the coordinates – column 8 and row 2
world.place(greenLock, at: Coordinate(column: 8, row: 2))
//Place the platform for greenLock at the coordinates – column 1 and row 5
world.place(Platform(controlledBy: greenLock), atColumn:1, row:5)

//Stacking 10 blocks on top of each other at coordinates – column 1 and row
8
for i in 1 ... 10 {
    world.place(Block(), at: Coordinate(column: 5, row: 6)    )
}
```

```
//Adding Water
//Remove the block where you wish to place Water()
world.removeBlock(atColumn: 5, row: 6)

//Place the water where you removed the block
world.place(Water(), atColumn: 5, row: 6)
```

DEFINITELY TRICKY

```
//Stack multiple blocks at different locations at once
//set your locations - this example uses four locations
//set locations for blocks in an array called blockLocations
var blockLocations = [
    Coordinate(column: 1, row: 6),
    Coordinate(column: 1, row: 7),
    Coordinate(column: 1, row: 8),
    Coordinate(column: 1, row: 9),
]

//place 2 blocks at locations in blockLocations
for coordinate in blockLocations {
    for i in 1 ... 2 {
        world.place(Block(), at: coordinate)
    }
}

//remove multiple blocks at different locations at once
//set your locations - this example involved two entire columns
//set locations for blocks in an array called removeBlocks
let removeBlocks = world.coordinates(inColumns: [3,4], intersectingRows:
[0,1,2,3,4,5,6,7,8,9])

//remove blocks from column 3 and 4
for i in removeBlocks {
    world.removeBlock(at: i)
}
```

GOOD LUCK!