1496. Path Crossing

Easy   ◇ Topics   🔒 Companies   ◔ Hint

Given a string `path`, where `path[i] = 'N'`, `'S'`, `'E'` or `'W'`, each representing moving one unit north, south, east, or west, respectively. You start at the origin `(0, 0)` on a 2D plane and walk on the path specified by `path`.

Return `true` if the path crosses itself at any point, that is, if at any time you are on a location you have previously visited. Return `false` otherwise.

Code

```swift
class Solution {
    func isPathCrossing(_ path: String) -> Bool {
        var s = Set<[Int]>()
        s.insert([0,0])
        var last = [0,0]
        var a: [Character:[Int]] = [:]
        a["N"] = [0,1]
        a["S"] = [0,-1]
        a["E"] = [1,0]
        a["W"] = [-1,0]
        for i in path {
            if let t = a[i] {
                last[0] = last[0] + t[0]
                last[1] = last[1] + t[1]

                if s.contains(last) {
                    return true
                } else {
                    s.insert(last)
                }
            }
        }
        return false
    }
}
```