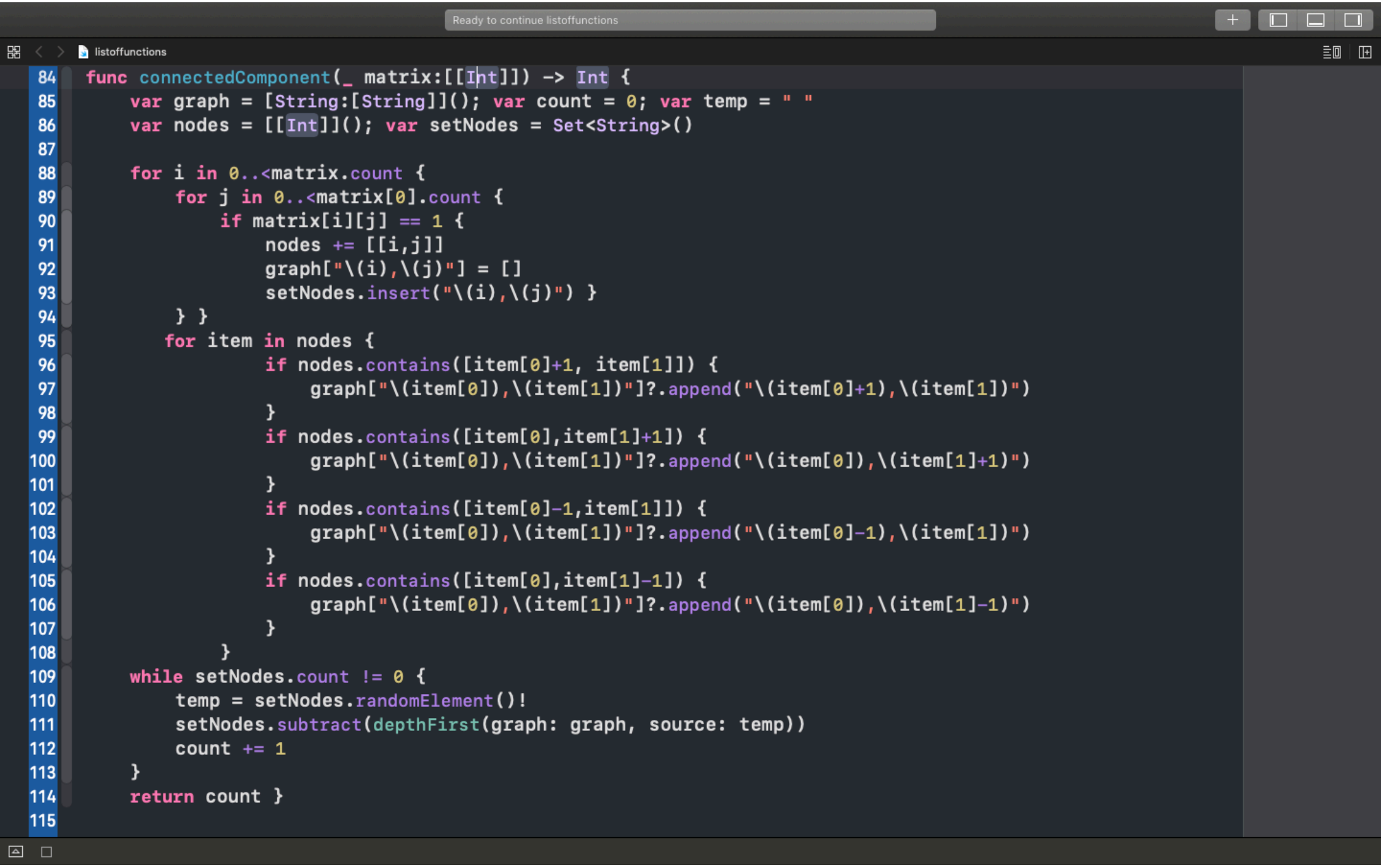
Ready to continue listoffunctions
listoffunctions
84 func connectedComponent(_ matrix:[[Int]]) -> Int {
85 var graph = [String:[String]](); var count = 0; var temp = " "
86 var nodes = [[Int]](); var setNodes = Set<String>()
87
88 for i in 0..<matrix.count {
89 for j in 0..<matrix[0].count {
90 if matrix[i][j] == 1 {
91 nodes += [[i,j]]
92 graph["\(i),\(j)"] = []
93 setNodes.insert("\(i),\(j)") }
94 } }
95 for item in nodes {
96 if nodes.contains([item[0]+1, item[1]]) {
97 graph["\(item[0]),\(item[1])"]?.append("\(item[0]+1),\(item[1])")
98 }
99 if nodes.contains([item[0],item[1]+1]) {
100 graph["\(item[0]),\(item[1])"]?.append("\(item[0]),\(item[1]+1)")
101 }
102 if nodes.contains([item[0]-1,item[1]]) {
103 graph["\(item[0]),\(item[1])"]?.append("\(item[0]-1),\(item[1])")
104 }
105 if nodes.contains([item[0],item[1]-1]) {
106 graph["\(item[0]),\(item[1])"]?.append("\(item[0]),\(item[1]-1)")
107 }
108 }
109 while setNodes.count != 0 {
110 temp = setNodes.randomElement()!
111 setNodes.subtract(depthFirst(graph: graph, source: temp))
112 count += 1
113 }
114 return count }
115