HW5

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1.

```
// Given a graph G createG2 creates the new graph
function createG2(G) {
    G2 // The new Graph
    Visited[] // dictionary of visited Nodes
    foreach(G.N as N) { // N is a node from the array G.N
          N.visited = true
          N1 = copy(N) // hard copy of N
          forEachNeighbor(N as Neighbor) {
            forEachNeighbor(Neighbor as NPrime) { // NPrime is the neighbor o
                if(!NPrime.visited) {
                    NewNode = copy(NPrime); // hard copy of NPrime
                    append(N1.N, NewNode) // append NewNode to N1 agency list
                }
            }
          }
          if(length(N1.N) > 0) { // If N1 is adjacent to 1 or more other node
            append(G2.N, N1) // Appends N1 to list of nodes in graph G2.
          }
    }
    return G2
}

Node {
    visited // by default this is false
    N[] // adjacency list
}
```

```
Graph {
    N[] // List of nodes
}
```