**Clone a Graph**

Clone an undirected graph. Each node in the graph contains a label and a list of its neighbors.

public class Solution **{**

public UndirectedGraphNode cloneGraph**(**UndirectedGraphNode node**)** **{**

**if(**node **==** **null)**

**return** **null;**

HashMap**<**Integer**,**UndirectedGraphNode**>** map **=** **new** HashMap**();**

Deque**<**UndirectedGraphNode**>** queue **=** **new** LinkedList**();**

map**.**put**(**node**.**label**,** **new** UndirectedGraphNode**(**node**.**label**));**

queue**.**offer**(**node**);**

**while(!**queue**.**isEmpty**()){ //BFS to get on each node**

UndirectedGraphNode auxNode **=** queue**.**poll**();**

**for(**UndirectedGraphNode nodo **:** auxNode**.**neighbors**){**

**if(!**map**.**containsKey**(**nodo**.**label**))**

**{**

map**.**put**(**nodo**.**label**,** **new** UndirectedGraphNode**(**nodo**.**label**));**

queue**.**offer**(**nodo**);**

**}**

map**.**get**(**auxNode**.**label**).**neighbors**.**add**(**map**.**get**(**nodo**.**label**));**

**}**

**}**

**return** map**.**get**(**node**.**label**);**

**}**

**}**