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1 |----- MODULE GraphsUtil -----|
  | A module that defines graphs and the operations on them. |
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  | A directed graph is a pair consisting of a set of nodes and a set of directed edges, each of which |
  | is a pair of nodes. It is represented by a record with node field and edge field. |
11 IsDirectedGraph(G)  $\triangleq$ 
12    $\wedge G = [node \mapsto G.node, edge \mapsto G.edge]$ 
14 EmptyGraph  $\triangleq$  [node  $\mapsto \{\{\}\}$ , edge  $\mapsto \{\}$ ]
16 g  $\oplus$  h  $\triangleq$  | A union (in terms of set) of two graphs g and h.
17   [node  $\mapsto g.node \cup h.node$ , edge  $\mapsto g.edge \cup h.edge$ ]
18 |-----|
   \ * Modification History
   \ * Last modified Wed Dec 19 11:36:22 CST 2018 by hengxin
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