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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 11:34:58 CST 2018 by hengxin
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