
MODULE *GraphsUtil*

A digraph is a pair of a set of nodes and a set of directed edges, each of which is a pair of nodes.

$IsGraph(G) \triangleq$ Represented by a record with node field and edge field.

$\wedge \quad G = [node \mapsto G.node, \text{edge} \mapsto G.edge]$

$EmptyGraph \triangleq [node \mapsto \{\{\}\}, \text{edge} \mapsto \{\}]$

$g \oplus h \triangleq$ A union (in terms of set) of two graphs g and h .

$[node \mapsto g.node \cup h.node, \text{edge} \mapsto g.edge \cup h.edge]$

\ * Modification History

\ * Last modified *Thu Jan 03 16:38:09 CST 2019* by *hengxin*

\ * Created *Wed Dec 19 11:11:25 CST 2018* by *hengxin*