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T-irreducible Extension for Union of Paths and Cycles

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A graph H with $n + 1$ nodes is an extension of a graph G with n nodes if each maximal subgraph of H contains G . Trivial extension of a graph G is the connection of graph G and the singleton graph (i.e. we add one node to the graph G and this node join with each node of G). T-irreducible extension of graph G is an extension of the graph G which is obtained by removing maximal set of edges from the trivial extension of G . One of T-irreducible extensions is constructed for an arbitrary union of cycles and paths.

Key words: graph, T-irreducible extensions, union of paths and cycles.

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