Abstract

A Connected graph G is a Hamiltonian laceable if there exists in G a Hamiltonian path between every pair of vertices in G at an odd distance. G is a Hamiltonian-t-Laceable (Hamiltonian-t*-Laceable) if there exists in G a Hamiltonian path between every pair (at least one pair) of vertices at distance \( t \) in G. In this paper we explore the Hamiltonian-t*-laceability number of graph L(G) i.e., Line Graph of G and also explore Hamiltonian-t*-Laceable of Line Graphs of Sunlet graph, Helm graph and Gear graph for \( t = 1, 2 \) and 3.

References


**Index Terms**

Computer Science  
Applied Mathematics

**Keywords**

Connected graph  
Line graph  
Sun let graph  
Helm graph  
Wheel graph  
Gear graph and Hamiltonian-t-laceable graph.