

Graph HW

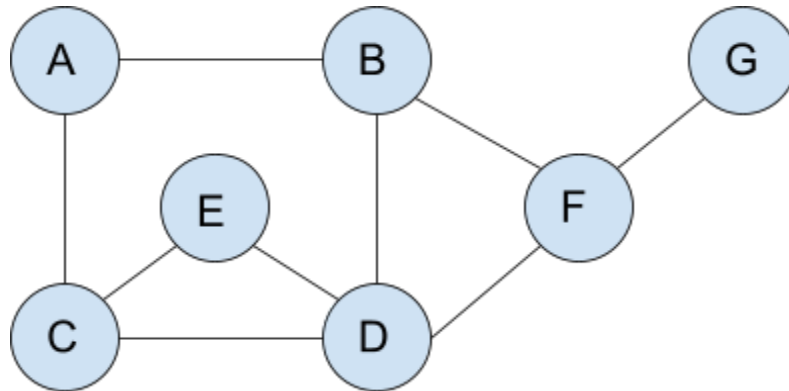


Fig: Graph

Tasks:

1. Construct Adjacency matrix.
2. Find degrees of all Nodes and print them.
3. Print degree based on query. [If user input='A' degree=2]
4. Print Adjacent nodes based on query. [If user input='A' Adjacent= B,C]
5. Detect Loop in Graph and print them if found.
6. Detect multiloop in Graph and print them if found.
7. If two nodes are not adjacent, can they be connected through a node? Print them.
[In the graph, B and E are not adjacent but can be connected through node D]
8. If two nodes can not be connected through one node, can they be connected through two nodes? Print them.
[In the graph, E and G can be connected through D and F node]