

Assignment-1: Please implement the maximal clique enumeration algorithm from the three given papers:

- Paper: The worst-case time complexity for generating all maximal cliques and computational experiments.
  - You will be implementing the procedure CLIQUE at page 31 of the paper.
- Paper: Listing All Maximal Cliques in Sparse Graphs in Near-Optimal Time
  - You will be implementing proc BronkerboschDegeneracy(V,E) (Fig. 4)
- Paper: Arboricity and Subgraph Listing Algorithms
  - You will be implementing procedure CLIQUE (pages 220:222).

Language: You will be implementing all these algorithms either in C/C++.

Dataset: I will be providing 2-3 graph dataset for you to experiment with the implementation to get the runtime of different algorithms.

Deliverables:

1. Source code of your own implementation.
2. Report on your observations and runtime comparison.
3. A project webpage showcasing this project. (you can create one either in github or other free hosting platform).

I will be adding more details here whenever required.