

Ans:(6)

Processing Wiki-Vote Dataset with Limited Girvan-Newman:

- Girvan-Newman time (Wiki-Vote Dataset): 11169.37 seconds
- One Iteration Louvain time (Wiki-Vote Dataset): 463.48 seconds

Processing Last.fm Asia Dataset with Limited Girvan-Newman:

- Girvan-Newman time (Last.fm Asia Dataset): 13890.57 seconds
- One Iteration Louvain time (Last.fm Asia Dataset): 545.62 seconds

Summary of Results

Wiki-Vote Dataset

- Best Modularity (Girvan-Newman): 0.0005953869273333943
- Number of communities detected (Girvan-Newman): 28
- Number of communities detected (Louvain): 33

Last.fm Asia Dataset

- Best Modularity (Girvan-Newman): 0.0
- Number of communities detected (Girvan-Newman): 1
- Number of communities detected (Louvain): 33