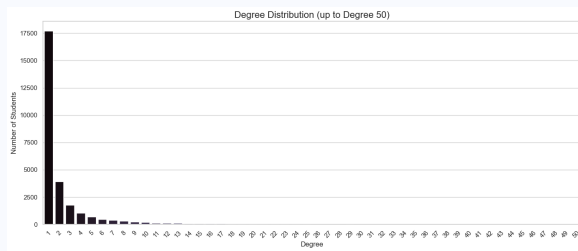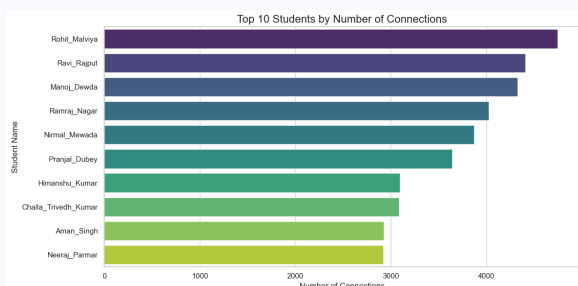# LinkedIn Data Public Network Report

Introduction

This report analyzes the LinkedIn network of students LinkedIn Data Connection.Various statistical insights and visual graphs have been generated to study connectivity patterns, influence, and overall network structure.
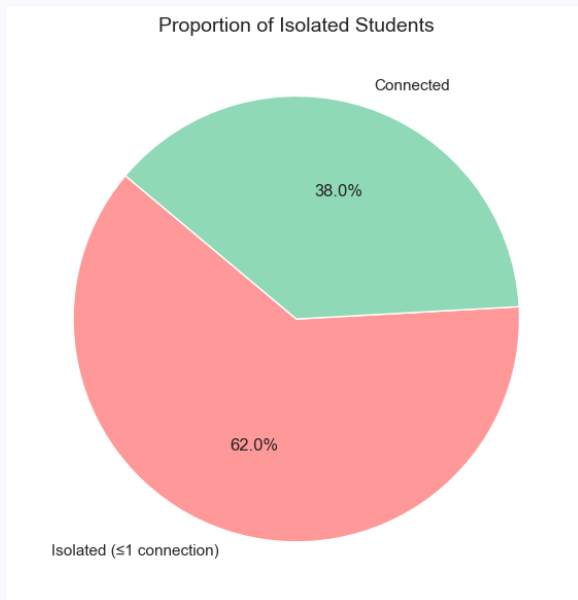
1. Degree Distribution

Degree Distribution (up to Degree 50)

- Shows how many connections students typically have.
- A large number (17,000+) have only one connection.

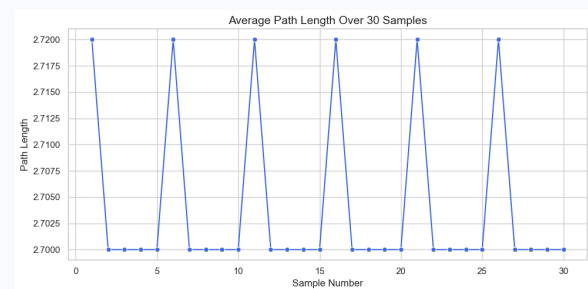### 2. Top 10 Students

Top 10 Students by Number of Connections

- Rohit Malviya is the most connected with 4747 connections.
- Shows potential influencers in the network.

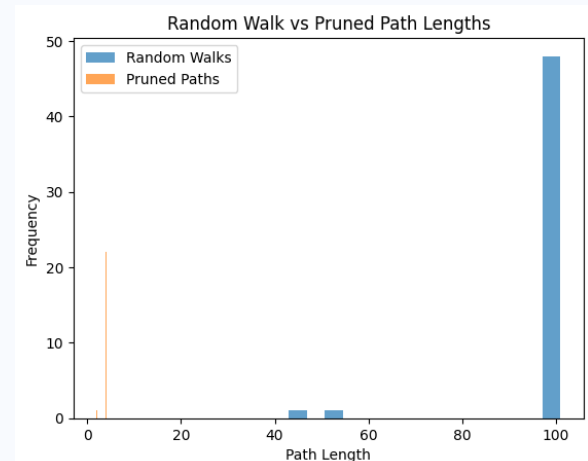### 4. Isolated vs Connected

Proportion of Isolated Students

- Over 60% of students have 1 or fewer connections.
- Suggests possible disconnected subgroups.

5. Average Path Length (Sampled)

Average Path Length Over 30 Samples

- Average path between random students is 2.73 steps.
- Indicates a well-connected overall network.

6. Random Walks vs Shortest Paths

Random Walk vs Pruned Path Lengths

- Compares efficiency of reaching nodes through random walks.
- Walks are less efficient than shortest paths but informative.

Conclusion

The LinkedIn network of the student community exhibits small-world properties with short path lengths and influential hubs. These insights help in understanding student engagement, collaboration potential, and digital outreach.