Combinatorial Optimization Report

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Introduction

In this report, we research about three basic algorithms based on solving the combinatorial optimization, included maximum network flow, shortest path, and minimum spanning tree. We also design the interface for input from the user. Some basic features in this demo version such as Add, Insert, Delete, Dropout, Change parameters,...

The language we use for programming is Java.

Chapter 1

Introduction

1.1 Maximum Network Flow

[1]

1.2 Shortest Path

1.3 Minimum Spanning Tree

[2]

Chapter 2

The State-of-The-Art

Chapter 3

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Conclusion

Conclusion

In this assignment, we have explored three basic algorithms based on solving the combinatorial optimization:

1. Maximum network flow
2. Shortest path
3. Minimum spanning tree

We also design a demo program to visualize the networks.

References

[1] Maximum flow problem. https://en.wikipedia.org/wiki/Maximum_flow_problem. Accessed: March 24th, 2019.

[2] Minimum spanning tree. https://en.wikipedia.org/wiki/Minimum_spanning_tree. Accessed: March 24th, 2019.