Project 2

Xiao Wei's Problem

Dong Li, 14212010008@fudan.edu.cn

Nov. 3, 2014

General Information

- Solve Xiao Wei’s problem
- In Java
- Handout: Nov. 3, 2014
- Available on FTP PROJECT directory

Introduction

- Xiao Wei is a fresher in Fudan University from Shandong Province, so he is not familiar with the Shanghai Metro
- He likes hanging out with his girl friend at weekends by metro
- He needs your help

Shortest-Path

- Single-source shortest-path
  - Dijkstra’s algorithm
  - Bellman-Ford algorithm
- All-pairs shortest-path
  - Floyd algorithm

Input & Output

- Input
  - Origin
  - Several middle stations that Xiao Wei wants to go (<= 15)
  - Destination
  - Format: origin m-station1 m-station2 … destination
- Output
  - The shortest path from origin to destination passing the several middle stations. (If there are more than one path, choose the one with less interchange, if the time of interchange is the same, output all of them)
  - Format: station-line X-station-…

Requirement

- Shortest path (input origin and destination only)
- Shortest path (input additional middle stations)
- Development Document
- *Optional*: Optimize your tool

Grading

Part	Percentage
Shortest path (input origin and destination only)	35%
Shortest path (input additional middle stations)	35%
Performance (Time)	15%
Development Documentation	15%
Optimization	10%(*bonus*)

Submission

- Deadline: Nov. 23 2014, 23:59 (GMT+08:00)
- Package your project (include the source code)
- Submit to FTP
- Face-to-face interview

Policy

- No cheating
- No late policy

Thanks!

Q&A

Feel free to contact me via E-mail or WeChat