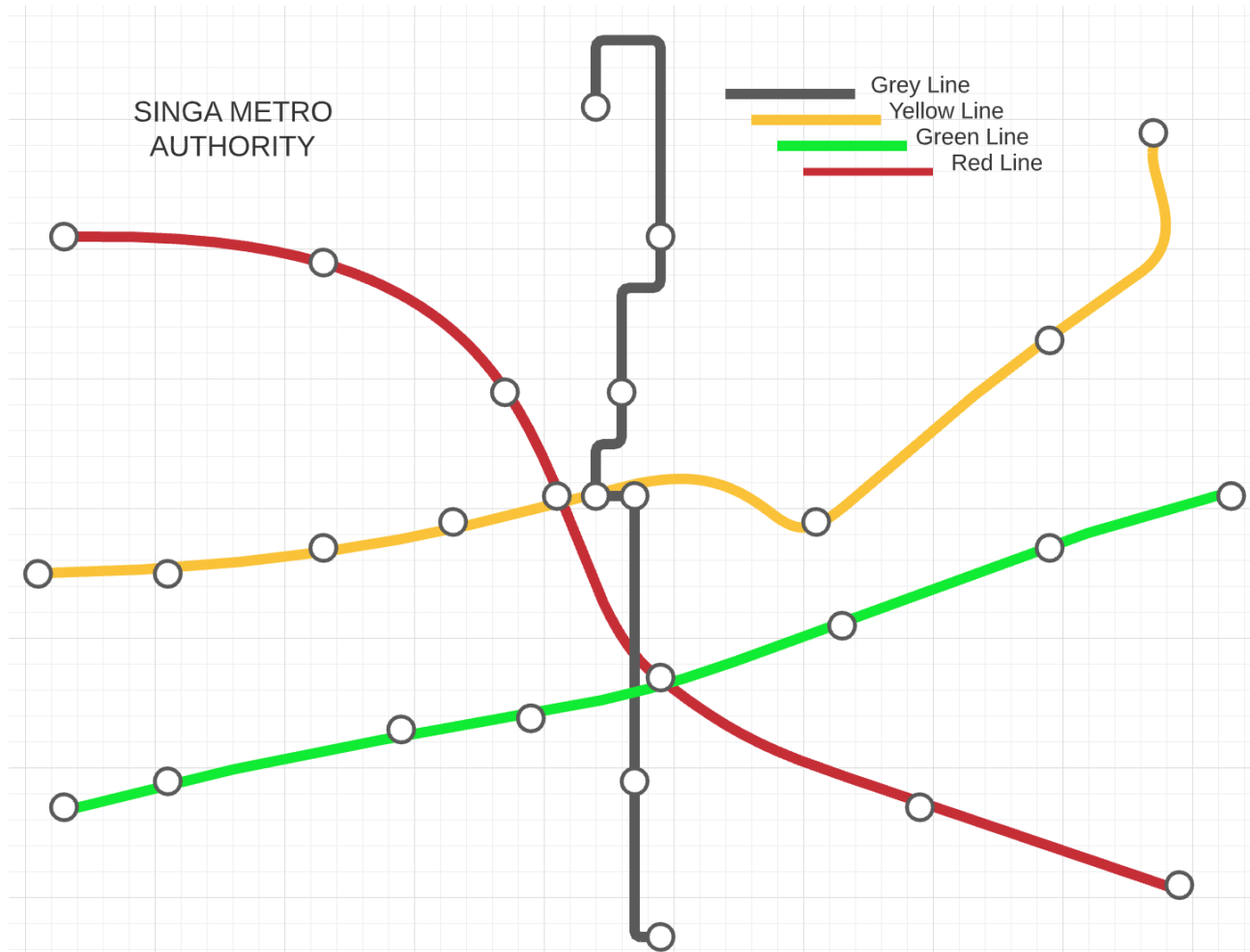


Singa metro authority

The public transport system for city of Singa - Singa metro authority (SMA) wants to design a payment system for its service. They allow all banks credit and debit NFC enabled cards to tap at entry and exit. They also sell NFC enabled rechargeable SmartTap cards.

The metro system is divided into Lines named with different colours. There will be multiple stations on each line. The fare is calculated based on the Lines you are travelling. There can be more Lines and more stations coming in future.



Problem statement

Design a fare calculation system for SMA. There are only two lines Red and Green. Fare is only based on the lines the user is travelling. To keep it simple, stations are not considered for the task. Consider all the fare rules.

Expected time : 6-8 hours

Input

FromLine,ToLine,DateTime

To keep it simple in your code, consider a CSV as input

Example,
Green, Green, 2021-03-24T07:58:30
Green, Red, 2021-03-24T09:58:30
Red, Red, 2021-03-25T11:58:30

Output

Total fare applied

Rules

Fares

From Line	To Line	Peak	Non peak
Green	Green	\$2	\$1
Red	Red	\$3	\$2
Green	Red	\$4	\$3
Red	Green	\$3	\$2

Peak hours

Monday to Friday - 8:00 to 10:00, 16:30 to 19:00
Saturday - 10:00 to 14:00, 18:00 to 23:00
Sunday - 18:00 to 23:00

Fare cap

To protect commuters from over charging, there are fare caps. There is a daily cap and weekly cap. The cap is applicable based on journey is in same line or a different line, Here are the cap details

From Line	To Line	Daily cap	Weekly cap
Green	Green	8	55
Red	Red	12	70
Green	Red	15	90
Red	Green	15	90