Challenge for ML engineer

Challenge

For the top 10 users (with more checkins) build:

- **A basket of recommendation : venues(places)**
- **A list of likely venues (places) the user will visit based on their friends.**
- **Where they will go next (with probability scores).**

For the top 10 more "social" users (with more friends)

- **Draw the path (with map) of a week/month of users checkins.**
- **List your friends and how close they are in terms of "taste" (based on venues visited and ranked)**

Data

You are given a sqlite (fsdata.db) file with the following tables:

- **users** – consists of a set of users such that each user has a unique id and a geospatial location (latitude and longitude) that represents the user home town location.
- **venues** – consists of a set of venues (e.g. restaurants) such that each venue has a unique id and a geospatial location (latitude and longitude).
- **checkins** – marks the visits of users at venues. Each visit has a unique id as well as the user id and the venue id.
- **socialgraph** – contains the social graph edges (connections) that exist between users. Each social connection consists of two users (friends) represented by two unique ids (first_user_id and second_user_id).
- **ratings** – consists of implicit ratings that quantifies how much a user likes a specific venue.

You can download the data from:

https://mltestpublicdata.s3-ap-southeast-1.amazonaws.com/fsdata.db.zip

The file is compressed using zip data compression.

Instructions

The source code should be written in **Python, Java, Scala or Go**. Feel free to create classes, functions, etc. make sure all instructions to run your code are part of your submission.

Either submit your code by creating a project on github.com and sharing its link or via email, with a zip file with all the code.