

README

Run the files in the following order:

- svd.py
- collaborative_filtering.py
- cur.py
- data_handling.py
- error_funcs.py
- similarity_funcs.py
- final_run.py

or running final_run.py would be enough as all the functions are called in this file.

After running final_run.py following information will be printed in the terminal:

1. Collaborative Filtering Time
2. RMSE Collaborative Filtering
3. Top K precision Collaborative Filtering
4. Spearman correlation Collaborative Filtering
5. Collaborative Filtering with baseline Time
6. RMSE Collaborative Filtering with baseline
7. Top K precision Collaborative Filtering with baseline
8. Spearman correlation Collaborative Filtering with baseline
9. SVD Time
10. RMSE SVD
11. Top K precision SVD
12. Spearman correlation SVD
13. SVD Reduction Time
14. RMSE Reduction SVD
15. Top K precision SVD Reduction
16. Spearman correlation SVD Reduction
17. CUR Time
18. RMSE CUR
19. Top K precision CUR
20. Spearman correlation CUR
21. CUR Reduction Time
22. RMSE Reduction CUR
23. Top K precision CUR Reduction
24. Spearman correlation CUR Reduction

All the data here is stored in the folder dataset which contains a file namely u.data.
In this file data of 10^5 ratings are stored which is collected from internet.

In this file data is stored in four columns, where 1st column contains user id's, 2nd column contains movie id, 3rd column contains rating given by the specific user and 4th column contains the time stamp.

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