**This project contains below python file:**

* **main.py:** This file contains the code to provide the interaction with the user through the console as well as to show user list of recommendation items, to save to ratings given by user during session into ratings file.
* **load\_data.py :** This file contains the code for loading data from csv files.
* **svd.py :** This file contains the code for computing the predicted rating through SVD.
* **IISIM\_final.py:** This file contains the code for computing correlation based similarity between two books based on ratings given so far.
* **genre\_author\_based.py:** This file contains the code for computing genre and author based similarity between two books based on actions performed.
* **get\_similarbooks\_by\_author.py:** This file contains the code for calculating similarities between books by author during current session. If user is liking more books of one author during current session, the next recommendation will be performed based on this.

**This python files refer to below files**

* **books\_test\_SVD1\_900.csv:** This file contains meta data of each book
* **ratings\_test\_900.csv :** This file contains actual rating given by each user to each book.

**Note:**

* To run the program one shall change the path for above files based on the location where it is located for that one can change the values of the path variables in the code i.e. one shall change the value of bi\_filename, ur\_filename in following files:
  + load\_data.py
  + IISIM\_final.py
  + get\_similarbooks\_by\_author.py
  + genre\_author\_based.py

**To run the program one shall follow below instructions:**

* Set the path of the files in each code file by setting the variable names
* Run the **main.py** file
* It will ask for two options
  + New user (Register)(ask for favourite genre rest is need to implement)
  + Existing User (login)
* For existing user **svd.py** will be called and recommend the items based on the previous ratings data. As well as popularity based books are displayed.
* User can select any book from displayed list and can perform any action for example, give ratings, like, dislike or view(not included in prototype)
* Based on the action new items will be recommended if user select to get more new recommendation.
* If user selects to log out from system then current session rating information will be stored in ratings file.