Movie Recommender System

CS771, Group 1

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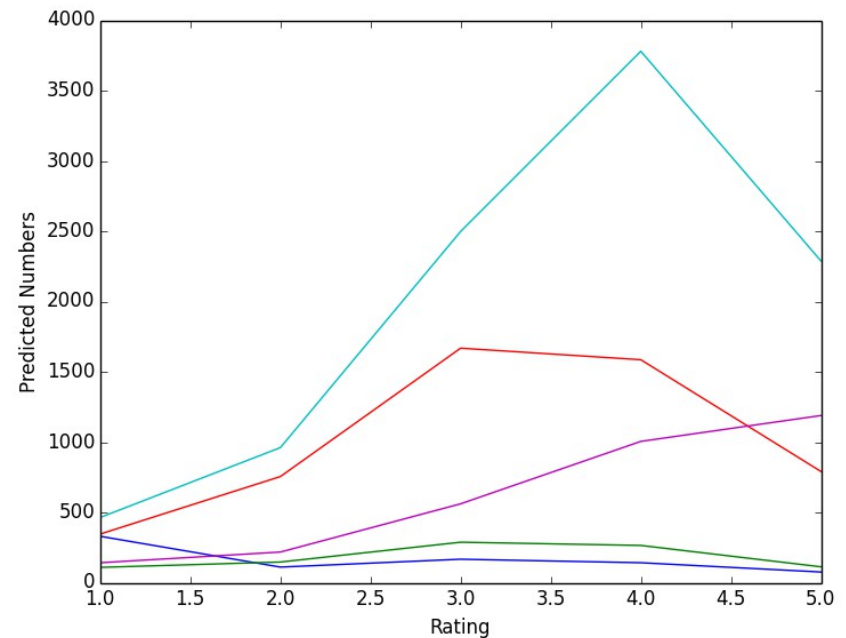Dhananjay Sharma

Approaches Followed

- Naive Approach : Train it on any classifier

- Content Based Filtering : Based on genre (feature vector) of movie

- Low Rank Matrix Factorization : Extension of previous idea
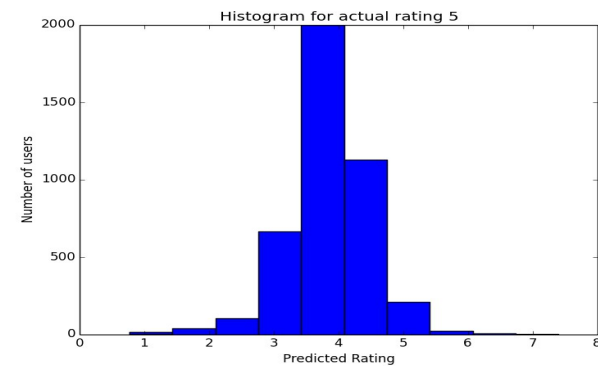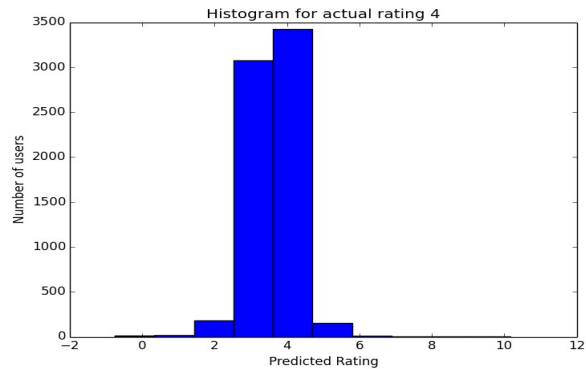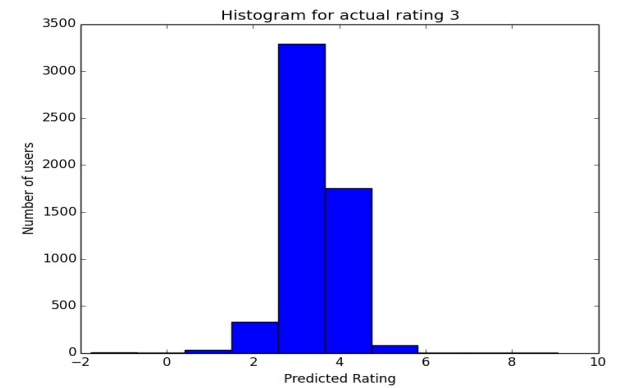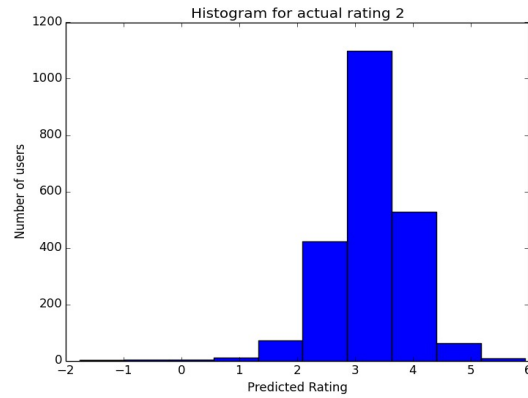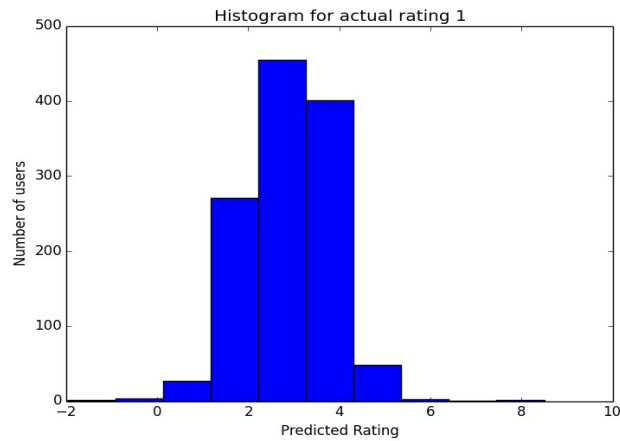
Naive Approach

- .arff file containing movies and users attributes

- Train it via some classifier

- Validate it : 35 % accuracy

Content Based Filtering

- Have the feature vector for movies (genres)

- Pose it as a minimization problem

- Apply Linear Regression to get weight vector for each of the user

- Error rate of nearly 18 %

Content Based Filtering : Results

Low Rank Matrix Vectorization

- Extended Content Based Filtering to perturb both movie feature vector and user feature vector

- Useful when a new user rates a movie

- Error rate approximately the same as the previous one

THANK YOU