Recommender Systems

Week 2

Mujtaba Alboori 14201138

Introduction

We have focused this week in improving and implementing new similarity matrics. However, Most metrics that we have implemented did not show any improvement in comparison to Cosine and Pearson similarity metrics. Also, we have implemented threshold neighbourhood formation but it did not show any improvement but worsen the result. If you set the threshold really the RMSE drop significantly but the coverage is really small.

Implementation

similarity.metric. EuclideanDistance.Java

We have added the Euclidean distance has similarity matric but it seems have not improve the similarity.

similarity.metric. Manhattan Distance

We also have tried to implement the Manhattan distance which is worser than the Euclidean distance.

similarity.metric. TanimotoCoefficient.Java

We have implemented TanimotoCoefficient, which supposed to only work on binary data set. However, it has give us better result than the rest of metric but not better than the Pearson similarity metric.

alg.ub.neighbourhood. ThresholdNeighbourhood.Java

ThresholdNeighbourhood has been implemented by setting certain threshold for the similarity.