The Great Recommendation Challenge

Week 4
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Introduction

This week, we have implemented the hybrid between Item-based and User-based then take the average of both result for prediction.
Also, we have implemented Inverse Frequency in Cosine similarity measurement. For similarity matric, we have implemented the hybrid similarity, which is a combination of Cosine, Pearson, and Euclidean distance. Then, we have implemented the weighted average predictor.

Implementation

Hybrid Based CF

We have created a package called ***alg.hybird*** for hybrid implementation. We have created two classes one is **ExecuteHybird.java** and ***HybirdBasedCF.java.*** We configure the Item- Based and User-Based Parameters in ExcuteHybird then execute and take the average in ***HybirdBasedCF.java .***

alg.ub.predictor.WeightedAverage

A new predictor has been created for user-based similarity in the package ***alg.ub.predictor.*** We have used the ***weightedAverage.Java.*** Technique.

Similarity Metric

Cosine Inverse Frequency has been implemented in the package ***similarity.metric*** . The file called ***CosineInverseFreq.Java***

Also, we have implemented a hybrid similarity, which uses multiple similarities metric. The implementation file called ***HybridSim.java. in package similarity.metric.***