

Mean absolute error → 0.62

Root mean squared error → 0.85

The Collaborative Filtering Algorithm predicts the rating that the active user would give for a particular movie. This prediction is done based on the rating given by other users in the dataset. The $w(a, i)$ tells the similarity between a user from the dataset and the active user for whom the prediction is being made (note: the movie for which we are predicting the rating for active user should be rated by the user in dataset). If both the active user and the user from dataset are more similar, then the rating predicted will be closer to the actual rating given by active user.

The mean absolute error is the difference between the actual rating given by the active user and the rating predicted by the algorithm.

Root mean squared error is the measure of accuracy, when we square the difference between the actual rating and the predicted rating then it gives high weightage to larger error. This throws more light on error. When the root mean squared error is greater than mean absolute error, that means that some of the predictions are deviating more the actual rating.