I attempt to use hybrid recommendation system by switching my own HW3 item based CF recommender and SVD model based recommender, but unfortunately failed (RMSE is not as good as pure model based recommendation).

Single Value Decomposition Model Based Recommendation System.

There is no model file generated since I am using "surprise" package.

I performed 10-fold Cross Validation to compare different combination of hyper-parameters (number of epochs, learning rate and regularization) for the provided SVD Model.