Pedro Villaroman

A10730199

CSE 190

Homework 3

**Task 1**

Alpha = 3.60335

MSE with predictor on test set = 2.617831892499797

**Task 2**

Item Bias for βI102776733 = 0.11761830224986271

User Bias for βU566105319 = -1.0584987923988236

MSE = 1.36155204806092406

**Task 3**

Jaccard Similarity: 0.75

Users with highest similarity to U622491081: U359587607, U096951499, U687939146, U296575297, U387971231, U300899166

**Task 4**

Part A

Alpha = 0.5331858495042331

Part B

mse = 74.4869061806201

absError = 18362.4004226

Part C

Alpha = 3.452e-1

B(words) = 2.694e-4

B(ratings) = 4.402e-2

Part D

MSE = 50.4414739502

Absolute Error = 16651.613061