COMPSCI 752 asg4

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1.

global bias: 3.8290028774583242

user specific bias: -0.4605818248267455

item specific bias: -0.05122509968054656

2.

epoch 0 : 0.14719248770022886

epoch 1 : 0.06588888855165902

epoch 2 : 0.05737682460209007

epoch 3 : 0.05586557074711237

epoch 4 : 0.05540639585154756

epoch 5 : 0.05522058857030671

epoch 6 : 0.05513187877878275

epoch 7 : 0.05508391853421205

epoch 8 : 0.055054425372373636

epoch 9 : 0.05503341684381576

3.

k: 4 RMSE: 0.0386876142261648

k: 8 RMSE: 0.03920266269850608

k: 16 RMSE: 0.041529990999900984

RMSE on test.json: 0.046342421149286814 with k=4

4.

epoch 0 : 0.5206309064081018

epoch 1 : 0.4274668641306317

epoch 2 : 0.3569993717237362

epoch 3 : 0.3301975962520634

epoch 4 : 0.31676058344150115

epoch 5 : 0.3088317697805808

epoch 6 : 0.30367992115612674

epoch 7 : 0.3001175504799343

epoch 8 : 0.29754475158200083

epoch 9 : 0.2956252554376577

bias for user: 0.7667185344295357

bias for item: 1.47938743763426

5.

k: 4 RMSE: 0.143889458574956

k: 8 RMSE: 0.1419246646423589

k: 16 RMSE: 0.13852708637058642

RMSE on test.json: 0.14032356360756484 with k=16

The result in task 5 is significantly worse than task 3