

Spark Version: 2.3.3

Python Version: 3.6

Task 2, Case 1: Model-based CF recommendation system

RMSE	1.15
Time (sec)	31.89 seconds

Task 2, Case 2: User-based CF recommendation system

RMSE	1.115
Time (sec)	152.12 seconds

Task 2, Case 3: Item-based CF recommendation system

Did not implement – do not check.