# CS 6350.001

# ASSIGNMENT 1 Solution

## Akshay Thakare

## netid: ast140230

## Que1 Solution.

**i. How to run Friends.jar:**

**Command:**

**hadoop jar ast140230jar/Friends.jar FriendSuggestionApplication /socNetData/networkdata /ast140230/<output\_dir\_name>**

**here, Friends.jar : Jar name for program 1**

**/socNetData/networkdata : input data for program**

**/ast140230/<output\_dir\_name> : output directory**

**ii. Recommendations for the users:**

924: 439,2409,6995,11860,15416,43748,45881

8941: 8943,8944,8940

8942: 8939,8940,8943,8944

9019: 9022,317,9023

9020: 9021,9016,9017,9022,317,9023

9021: 9020,9016,9017,9022,317,9023

9022: 9019,9020,9021,317,9016,9017,9023

9990: 13134,13478,13877,34299,34485,34642,37941

9992: 9987,9989,35667,9991

9993: 9991,13134,13478,13877,34299,34485,34642,37941

## Que2 Solution.

**i. How to run MutualFriends.jar:**

**Command:**

**hadoop jar ast140230jar/MutualFriends.jar /socNetData/networkdata /ast140230/output2 userA userB**

**here, MutualFriends.jar : Jar name for program 2**

**/socNetData/networkdata : input data for program**

**/ast140230/<output\_dir\_name> : output directory**

**userA, userB: Users for whom we are searching the mutual friends.**

**ii. Sample runs:**

**{cs6360:~} hadoop jar ast140230jar/MutualFriends.jar /socNetData/networkdata /ast140230/output2 1 2**

**{cs6360:~} hdfs dfs -cat /ast140230/output2/\***

**output: 1,2 0,135**

**{cs6360:~} hadoop jar ast140230jar/MutualFriends.jar /socNetData/networkdata /ast140230/output2.1 9995 9997**

**{cs6360:~} hdfs dfs -cat /ast140230/output2.1/\***

**output: 9995,9997 87**

## Que3 Solution.

**i. How to run MutualFriendsInMemory.jar:**

**Command:**

**hadoop jar ast140230jar/MutualFriendsInMemory.jar MutualFriendInMemoryApplication /socNetData/networkdata /socNetData/userdata userA userB /ast140230/output3.1**

**here, MutualFriendsInMemory.jar : Jar name for program 3**

**/socNetData/networkdata : input data for program**

**/socNetData/userdata : input data for program**

**/ast140230/<output\_dir\_name> : output directory**

**userA, userB: Users for whom we are searching the mutual friends.**

**ii. Sample runs:**

**{cs6360:~} hadoop jar ast140230jar/MutualFriendsInMemory.jar MutualFriendInMemoryApplication /socNetData/networkdata /socNetData/userdata 9995 9997 /ast140230/output3**

**{cs6360:~} hdfs dfs -cat /ast140230/output3/\* output: 9995 9997 [Robert:10011]**

**{cs6360:~} hadoop jar ast140230jar/MutualFriendsInMemory.jar MutualFriendInMemoryApplication /socNetData/networkdata /socNetData/userdata 1 2 /ast140230/output3.1**

**{cs6360:~} hdfs dfs -cat /ast140230/output3.1/\* output: 1 2 [Joshua:8901,Evangeline:45140]**

## Que4 Solution.

**i. How to run AverageAge.jar:**

**Command:**

**{cs6360:~} hadoop jar ast140230jar/AverageAge.jar AverageFriendAgeApplication /ast140230/output4**

**here, AverageAge.jar : Jar name for program 4**

**/ast140230/<output\_dir\_name> : output directory**

**ii. Sample run:**

**{cs6360:~} hadoop jar ast140230jar/Average.jar /ast140230/output4**

**{cs6360:~} hdfs dfs -cat /ast140230/output4/\* 6822, 518 Modoc Alley,Boise,Idaho,83703,US 86**

**48963, 4773 Crestview Manor,Indianapolis,Indiana,46214,US 85**

**7153, 1100 Matthews Street,Sterling,Illinois,61081,US 84**

**6872, 1465 Sunny Day Drive,Riverside,California,92501,US 83**

**9750, 4248 Chandler Drive,Joplin,Missouri,64801,US 82**

**823, 2225 Havanna Street,Creston,North Carolina,28615,US 81**

**9158, 921 Upton Avenue,South China,Maine,4358,US 80**

**9191, 2471 Star Route,Hillside,Illinois,60162,US 79**

**9041, 2312 Sweetwood Drive,Denver,Colorado,80216,US 78**

**7825, 2367 Meadow View Drive,West Hartford,Connecticut,6105,US 77**

**935, 1937 Palmer Road,Columbus,Ohio,43215,US 76**

**9149, 1481 Maloy Court,Wamego,Kansas,66547,US 75**

**9381, 2156 Cook Hill Road,Stamford,Connecticut,6905,US 74**

**9756, 4872 Sugar Camp Road,Owatonna,Minnesota,55060,US 73**

**990, 907 Ferrell Street,Cass Lake,Minnesota,56633,US 72**

**953, 1991 Roguski Road,Shreveport,Louisiana,71107,US 71**

**9625, 4277 Carriage Court,Ridgecrest,California,93555,US 70**

**9340, 761 Buffalo Creek Road,Nashville,Tennessee,37228,US 69**

**9428, 1359 Grant Street,Longview,Texas,75601,US 68**

**998, 1415 Layman Avenue,Fayetteville,North Carolina,28306,US 67**