**ASSIGNMENT 1**

**1)**

**i)** File Name: FriendRecommendation.java

Command to run:

hadoop jar FriendRecommendation.jar FriendRecommendation /socNetData/networkdata output

To see output1:

Hdfs dfs –cat output/\*

**ii)** Recommendations for the users with following user IDs:

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

2)

File Name: MutualFriends.java

Command to run :

hadoop jar FriendRecommendation.jar MutualFriends <user1> <user2> /socNetData/networkdata commonfriend

commonfriend contains the list of the user id of mutual friends for the given two user ids.

To see output2:

Hdfs dfs –cat commonfriend/\*

Output:

0:1 5,20

3)

File Name:

1. FriendsZipcode1.java
2. FriendsZipcode2.java

Command to run:

hadoop jar FriendRecommendation.jar InMemoryJoin <user1> <user2> /socNetData/networkdata/ intermediate\_output /socNetData/userdata/userdata.txt nameFriend

nameFriend contains the list of the names and the zipcode of their mutual friends.

To see nameFriend:

Hdfs dfs –cat nameFriend/\*

Output for userId 0 and 1:

0:1 [Beth:33463,Juan:29201]

4)

File Name: reduceSideJoin.java

Command to run:

hadoop jar FriendRecommendation.jar AverageAge /socNetData/userdata/userdata.txt /socNetData/networkdata /socNetData/userdata inter1 averageage

averageage contains User Name, address as given format and average age of all the direct friends of particular User Id. Top 20 users are sorted by the calculated average age from step 1 in descending order.

To see average:

Hdfs dfs –cat averageage\_int2/\*