Assignment: 1

Major details:

Jar file: Assignment1.jar

Each question has its own java file within the above mentioned jar file.

1. **Filename: MutualFriends.java**

Command to run the program: hadoop jar Assignment1.jar MutualFriends /socNetData/networkdata/soc-LiveJournal1Adj.txt output

To view the output: hdfs dfs -cat output/\*

For the following pairs:

(0,1) 5,20

(20, 28193) 1

(1, 29826)

(6222, 19272) 19623,19280,19281,19282

(28041, 28056) 6245,28054,28061

1. **Filename: MutualFriends\_user.java**

Generic command to run: hadoop jar Assignment1.jar MutualFriends\_user <userA> <userB> /socNetData/networkdata/soc-LiveJournal1Adj.txt output\_1

Command to run(with example): hadoop jar Assignment1.jar MutualFriends\_user 0 1 /socNetData/networkdata/soc-LiveJournal1Adj.txt output\_1

To view the output: hdfs dfs -cat output\_1/\*

Below is the output:

0,1 5,20

1. **Filename: InMemoryJoin.java**

Generic command to run: hadoop jar Assignment1.jar InMemoryJoin <userA> <userB> /socNetData/networkdata/soc-LiveJournal1Adj.txt intmd\_output /socNetData/userdata/userdata.txt output\_2

Command to run(with example): hadoop jar Assignment1.jar InMemoryJoin 0 1 /socNetData/networkdata/soc-LiveJournal1Adj.txt intmd\_output /socNetData/userdata/userdata.txt output\_2

To view the output: hdfs dfs -cat output\_2/\*

Below is the output:

0,1 [Beth:8/27/1970,Juan:9/12/1991]

1. **Filename: ReduceSideJoin.java**

Command to run: hadoop jar Assignment1.jar ReduceSideJoin /socNetData/userdata/userdata.txt /socNetData/networkdata/soc-LiveJournal1Adj.txt /socNetData/userdata/userdata.txt intmd\_output\_1 output\_3

To view the output: hdfs dfs -cat output\_3/\*

Below is the output:

Leticia,24,1653 Calvin Street,Columbia,Maryland,86.0

Rosalie,82,4806 Conaway Street,Columbus,Indiana,86.0

Jennifer,22,2820 Essex Court,Brattleboro,Vermont,86.0

Gloria,23,597 Austin Avenue,Savannah,Georgia,86.0

Joseph,71,3474 Corpening Drive,Southfield,Michigan,86.0

Raymond,21,4087 Bell Street,New York,New York,86.0

Ira,64,1822 Joanne Lane,Haverhill,Massachusetts,86.0

Lisa,57,3468 Austin Secret Lane,Beryl,Utah,86.0

Daisy,50,2729 Findley Avenue,Neche,North Dakota,86.0

Mary,33,4915 Marigold Lane,Miami,Florida,86.0