

# Assignment 1

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NETID: mxk152030

Q1:

## Sample Outputs

- i. (0,1)  
0,1 5,20
- ii. (20, 28193)  
20,28193 1
- iii. (1, 29826)  
No output
- iv. (6222, 19272)  
19272,6222 19263,19280,19281,19282
- v. (28041, 28056)  
28041,28056 6245,28054,28061

## Sample Result from the File:

9969,9972 9949  
9987,9988 9989,9990,9991,9993,9994  
9987,9989 9988,9990,9991,35667,9993,9994  
9987,9990 9988,9989,9991,35667,9993,9994  
9987,9991 9988,9989,9990,35667  
9987,9993 9988,9989,9990,35667,9994  
9987,9994 9988,9989,9990,35667,9993

Class: MutualFriendDriver

Execution command: MutualFriendDriver <input> <output>

**hadoop jar assnmt1/AssnmtQ1.jar MutualFriendDriver /socNetData/networkdata/soc-LiveJournal1Adj.txt /mxk152030/output**

Q2:

(0,1) -> 0,1 5,20  
(20, 28193) -> 20,28193 1  
(1, 29826) -> 1,29826  
(6222, 19272)-> 19272,6222 19263,19280,19281,19282

(28041, 28056)-> 28041,28056    6245,28054,28061

Class: MutualFriend

Execution Command: MutualFriend <input> <output> <user1> <user2>

**hadoop jar assnmt1/AssnmtQ2.jar MutualFriend /socNetData/networkdata/soc-LiveJournal1Adj.txt /mxk152030/output 0 1**

**Q3:**

(0,1) -> 0 1    [Beth:8/27/1970,Juan:9/12/1991]

(20, 28193) -> 20 28193    [Robert:11/26/1973]

(1, 29826) -> 1,29826 []

(6222, 19272) -> 19272 6222

[Willie:5/18/1965,Charles:2/2/1986,Hilton:6/22/1965,Betty:6/10/1958]

(28041, 28056) -> 28041 28056    [Taylor:8/17/1973,Carl:11/10/1981,Stephanie:9/21/1965]

**Class:** InMemoryJoin

Execution Command: InMemoryJoin <input> <output> <user1> <user2> <userDataFilePath>

**hadoop jar assnmt1/AssnmtQ3.jar InMemoryJoin /socNetData/networkdata/soc-LiveJournal1Adj.txt /mxk152030/output 0 1 /socNetData/userdata/userdata.txt**

Sample output:

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

20 28193 [Robert:11/26/1973]

1,29826 []

19272 6222    [Willie: 5/18/1965,Charles:2/2/1986,Hilton:6/22/1965,Betty:6/10/1958]

28041 28056    [Taylor: 8/17/1973,Carl:11/10/1981,Stephanie:9/21/1965]

**Q4:**

Class: ReduceJoin

Execution command: ReduceJoin <Mapper1Input friend data> <Mapper2Input UserData>  
<Intermediate Input> <Output>

**hadoop jar assnmt1/AssnmtQ4.jar ReduceJoin /socNetData/networkdata/soc-LiveJournal1Adj.txt /socNetData/userdata/userdata.txt /mxk152030/intOutput /mxk152030/output**

Result:

1 1775 Sycamore Circle,Dallas,Texas,86  
9973 2517 Payne Street,Sugar Land,Texas,86  
9957 3004 Jerry Toth Drive,Anchorage,Alaska,86  
9944 1603 Steve Hunt Road,Miami Springs,Florida,86  
9942 1941 Johnny Lane,Milwaukee,Wisconsin,86  
9940 2128 Poling Farm Road,Lincoln,Nebraska,86  
9919 2394 Church Street,New York,New York,86  
9906 516 Center Street,Sheridan,Oregon,86  
9902 633 Hillcrest Drive,Tacoma,Washington,86  
9885 2145 Kemper Lane,Salt Lake City,Utah,86  
9874 1074 Cemetery Street,Salinas,California,86  
9839 1680 Crim Lane,Mansfield,Ohio,86  
9828 477 Waterview Lane,Albuquerque,New Mexico,86  
9824 3751 Pick Street,Briggsdale,Colorado,86  
9808 1225 Strother Street,Tuscaloosa,Alabama,86  
9806 4551 Roane Avenue,Gaithersburg,Maryland,86  
9668 3807 Ridenour Street,Boca Raton,Florida,86  
9660 236 Lynn Ogden Lane,Vidor,Texas,86  
9600 4693 Modoc Alley,Meridian,Idaho,86  
9581 4982 Ben Street,Hunter,New York,86