**W1D5**

**There are four questions in this assignment. This assignment is due 10 AM Monday. Please read and understand all three questions very well so that you can solve them during the weekend.**

Q1. Write the pseudo code for In Mapper Pair approach. Illustrate your algorithm on a two mapper, four reducer setup.

Input Split 0:

12 90 80 12 19

17 12 80 18 90

Input Split 1:

19 12 80 17 90

17 12 17 18 80

The getPartition method is

**public** **int** getPartition(**int** key.getLeft()){

**return** (**int**) key % r;

}

Note that key is a pair of integers.

Q2. Implement a Java simulator for your algorithm in Q1. Hint: Start with your In Mapper wordCount project. Modify Mapper class and Reducer class. Make sure your workout answer coincides with the simulator answer.

Q3. Illustrate stripe algorithm on a two mapper, four reducer setup. *You need not use in mapper in this case.*

The getPartition method is

**public** **int** getPartition(**int** key){

**return** (**int**) key % r;

}

Note that key is an integer.

Q4. . Implement a Java simulator for stripe algorithm. Hint: Start with your wordCount project. Modify Mapper class and Reducer class. Make sure your workout answer coincides with the simulator answer.

Note: No result file is provided this time. You need to manually create them as part of Q1 and Q3 to verify your answers in Q2 and Q4.