Lab 3.

Write a Map/Reduce program that finds all the sales for each day. The output should be ordered by date in ascending order. Next, for each day, show all the sales ordered by time. Example output:

2017/1/1 6:23:11 43, 6:35:10 59 //43 and 59 are the IDs of the sales  
2017/1/1 ....

Write a Java program that doesn’t use Hadoop and finds the same result. Please use appropriate structures (e.g., HashSet, HashMap) to make the Java program as efficient as possible. Make sure you get the same result from both programs. Also, compare the performance of the two programs. For a fair comparison, make the Java program write the result to a file.