1. Map Reduce Task

Problem: find maximum monthly rented bikes per each station from the following bike share dataset example.

Input: A set of 6 records with format as:< station name, bike rented per day month >

- (ChinaTown, 100), (OxfordSt, 85)
- (OxfordSt, 60), (Abraham, 100)
- (ChurchSt, 80), (ChinaTown, 80)

Your Task: write down the Map and Reduce data flow steps/diagram to solve this problem

- Assume we split the input data

2. HDFS Task

Problem: suppose we have a cluster with 2 data nodes: node **DN1** and node **DN2** and want to distribute 2 files from a local file system to the HDFS cluster.

- **File 1** can be divided into three blocks: **B1 B2** and **B3** and the other **File 2** is divided into two blocks: **B4** and **B5**.

Your Task: is to distribute each **B1 B2 B3 B4** and **B5** block across our Data node **DN1**, **DN2**.