Using the below given two datasets you need to give a demo on the below joins in hive.

Bucket Map join

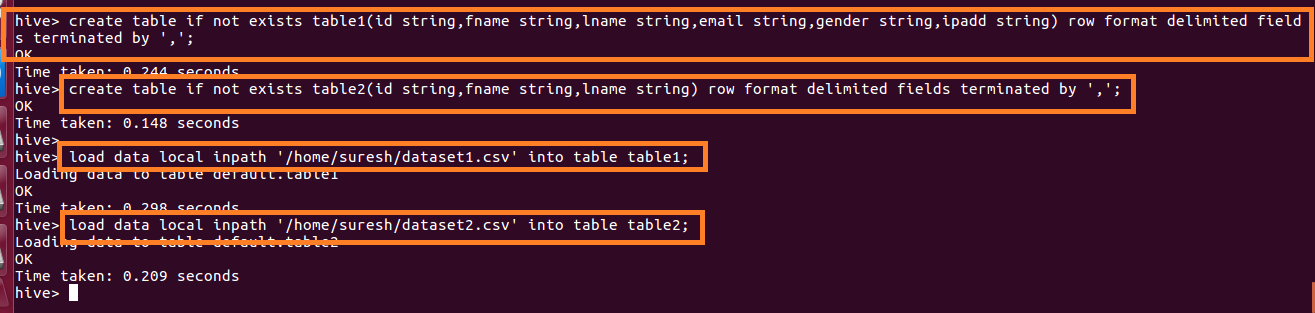
Sort-Merge Bucket join

Sort-Merge Bucket Map join

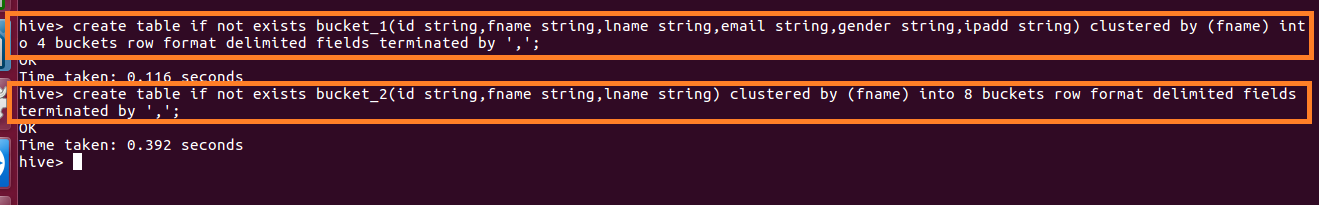
Left semi join

**Bucket Map join**

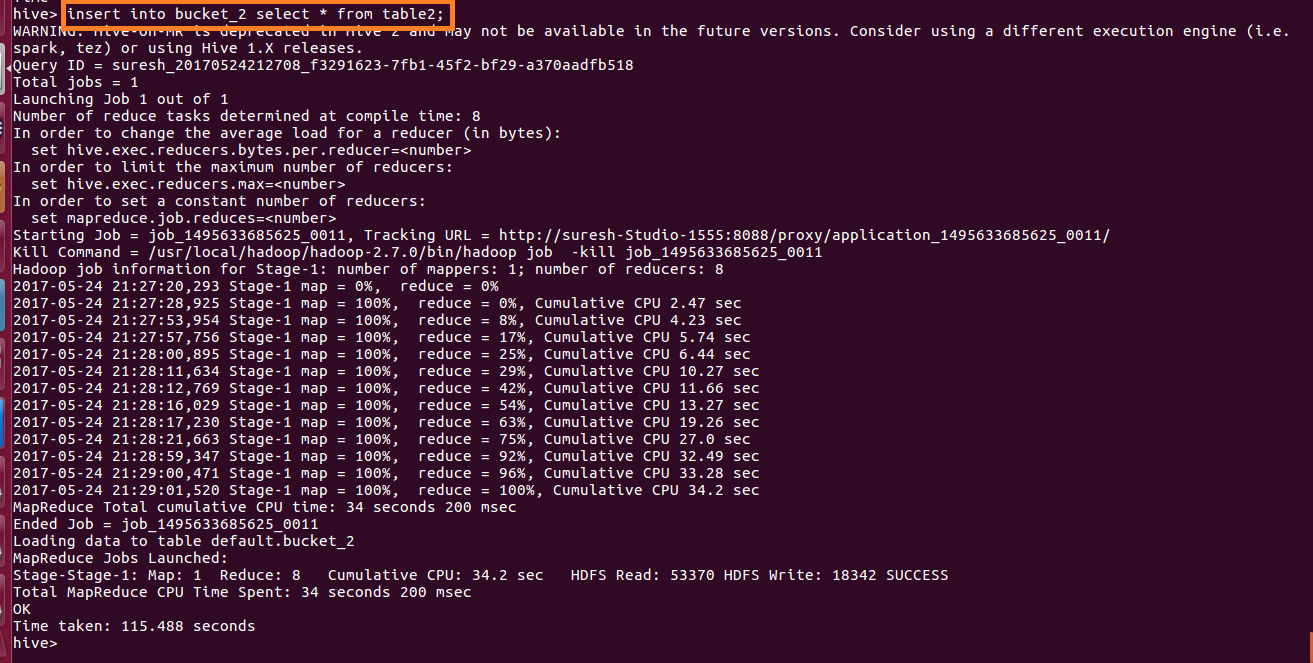
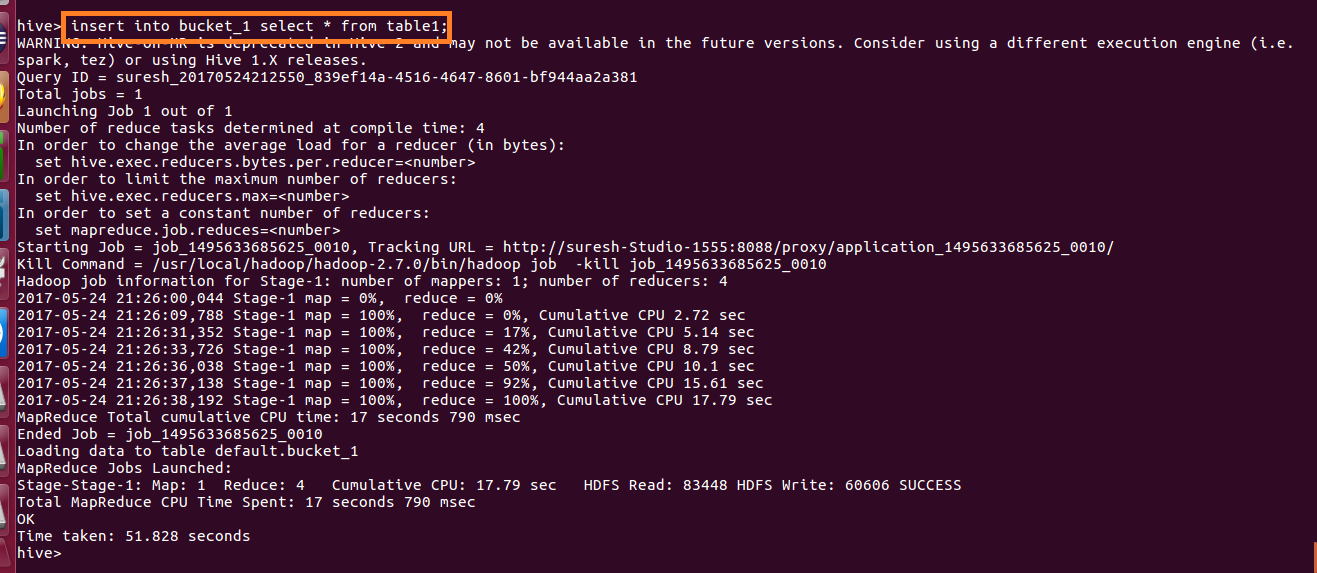
**Creating two tables and loading the data in these tables:**



**Creating 2 bucket tables with 4 and 8 buckets:**

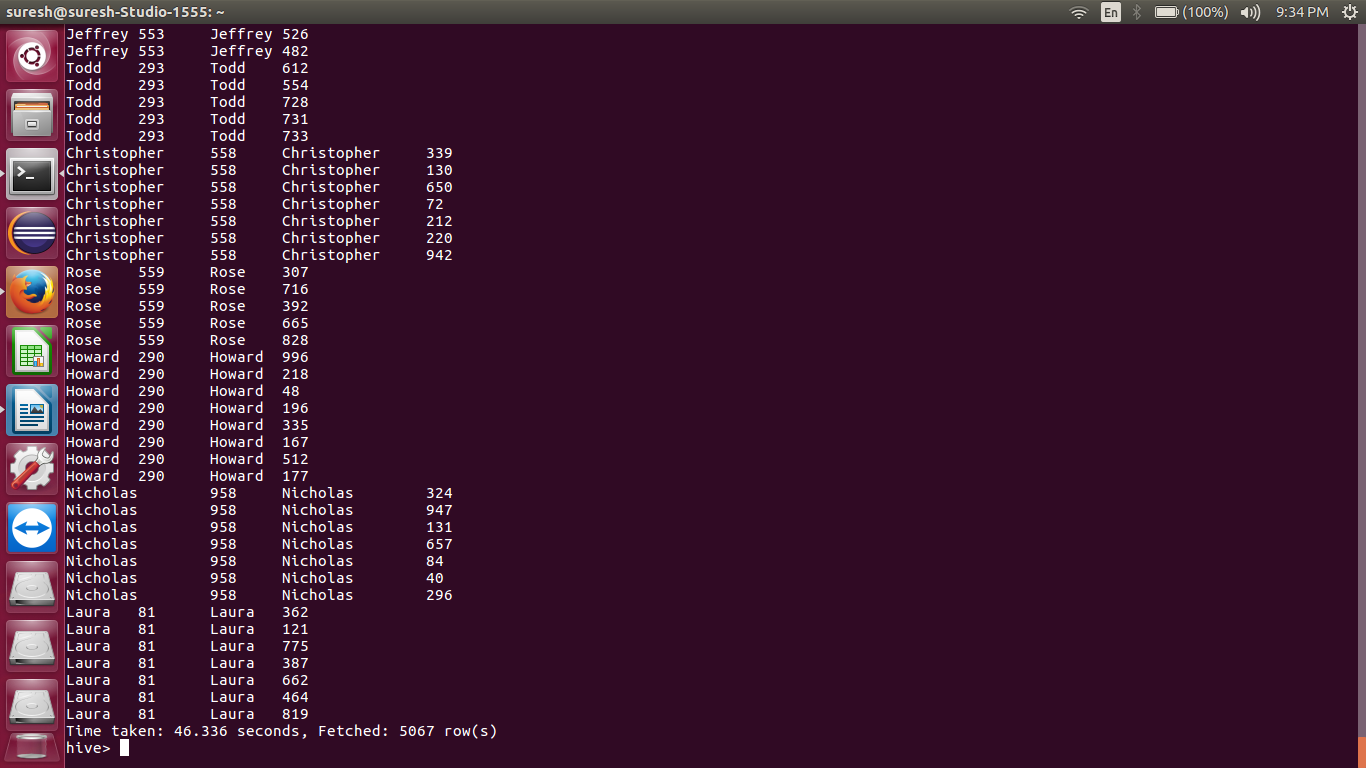
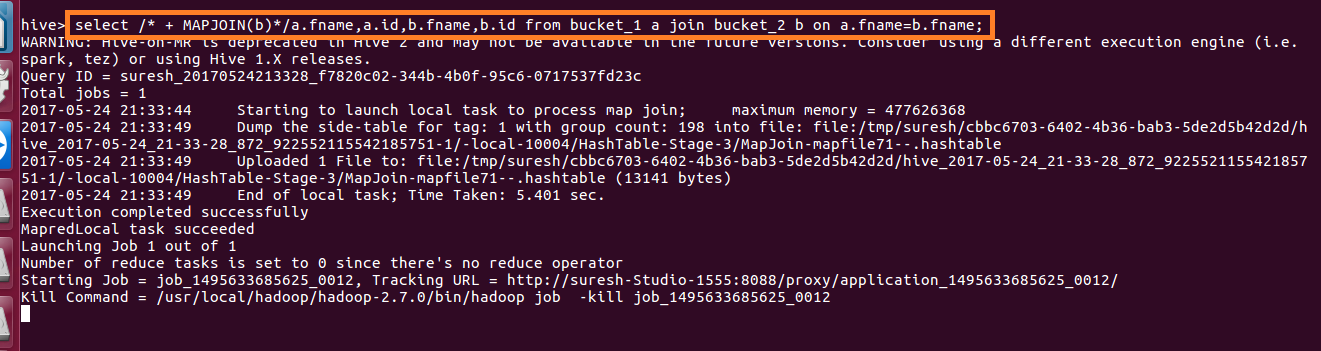


**Loading the data into bucket tables:**

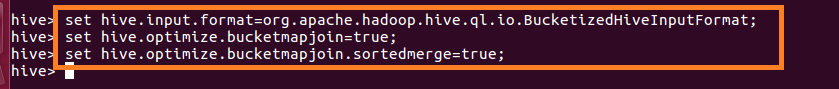


For performing Bucket-Map join, we need to set

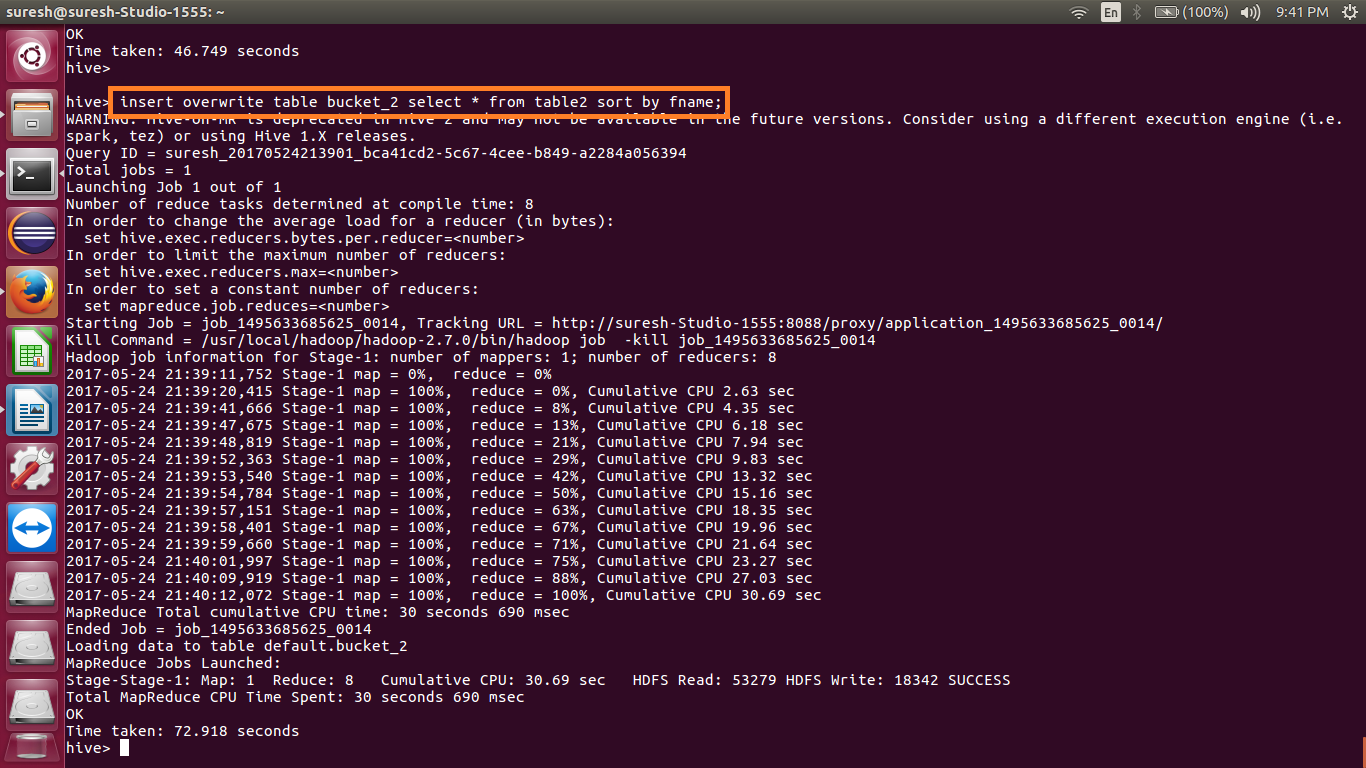
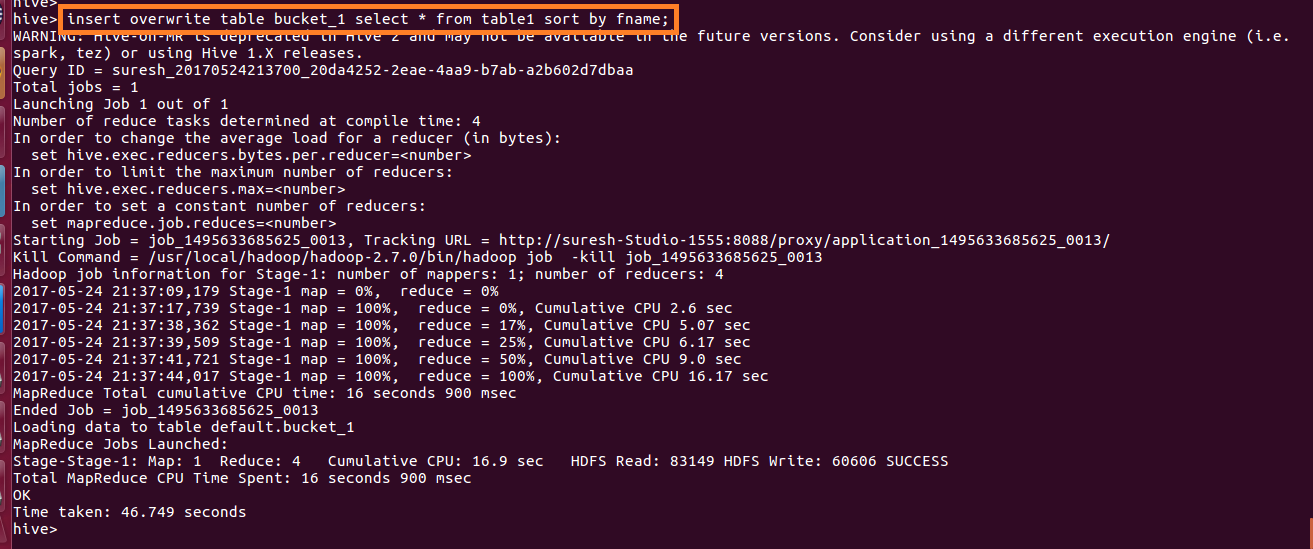
set hive.optimize.bucketmapjoin = true and **writing query for bucket map join**



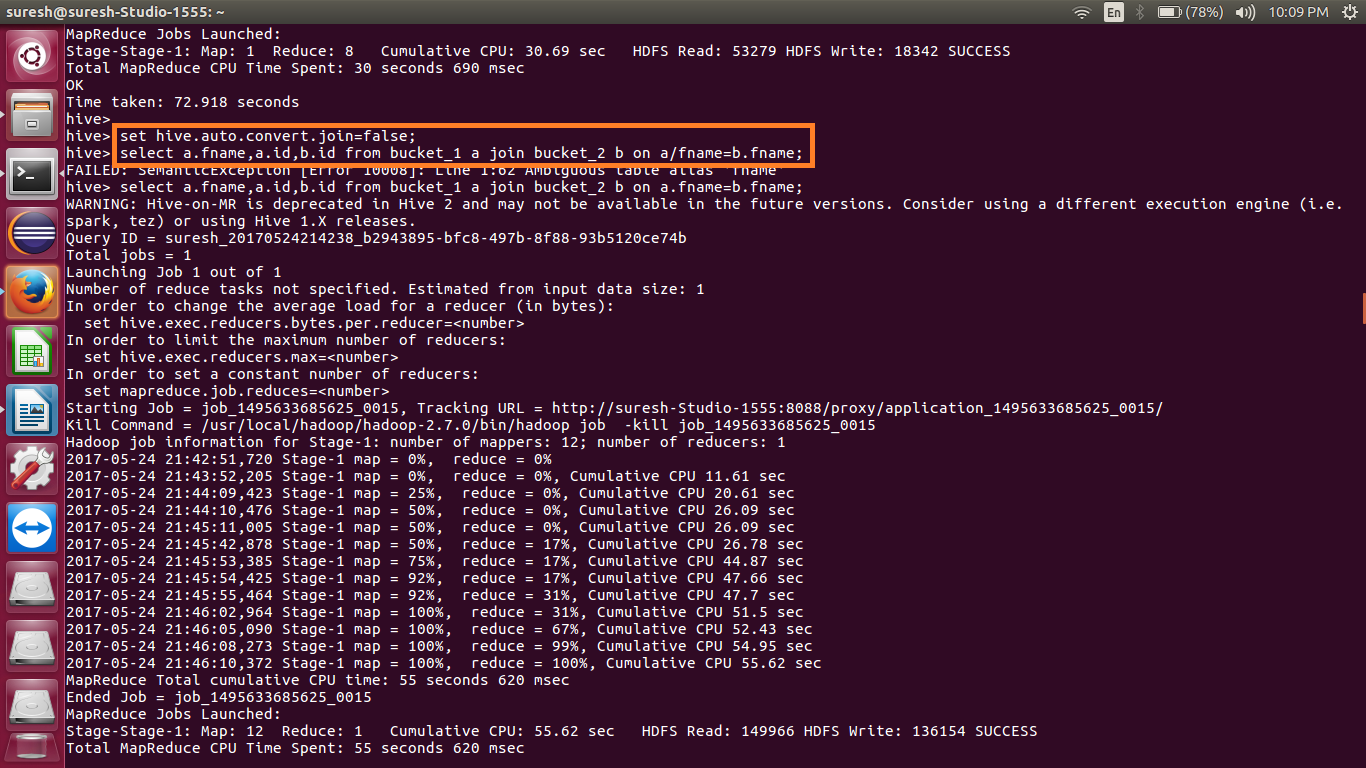
**Sort-Merge Bucket join**



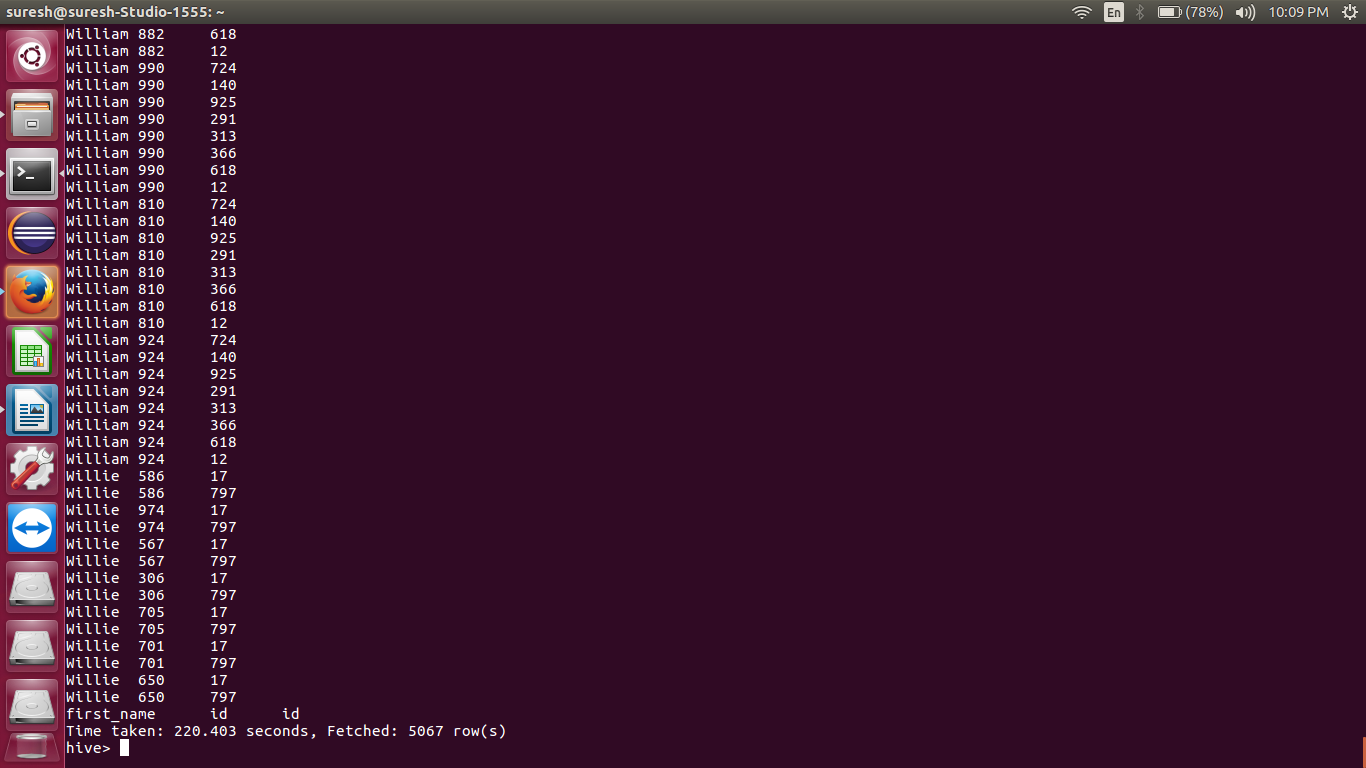
**Sorting the contents of bucket tables:**



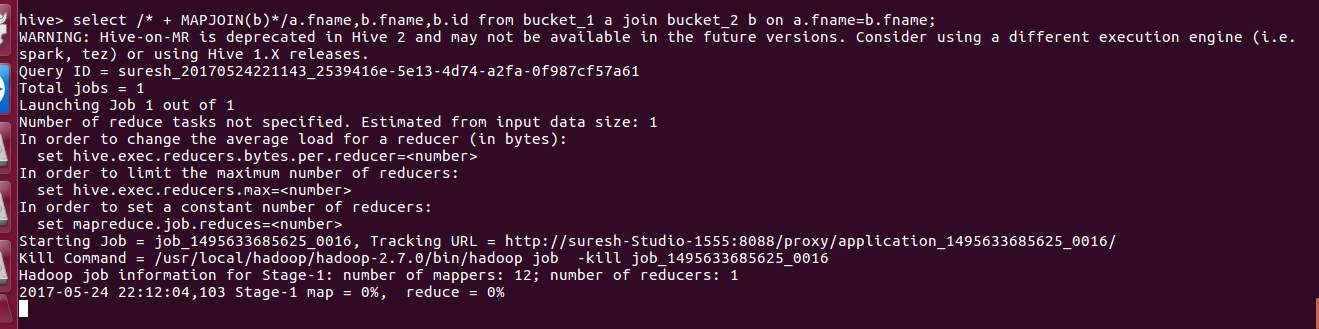
**Writing query for sort merge bucket join:**



**Output:**



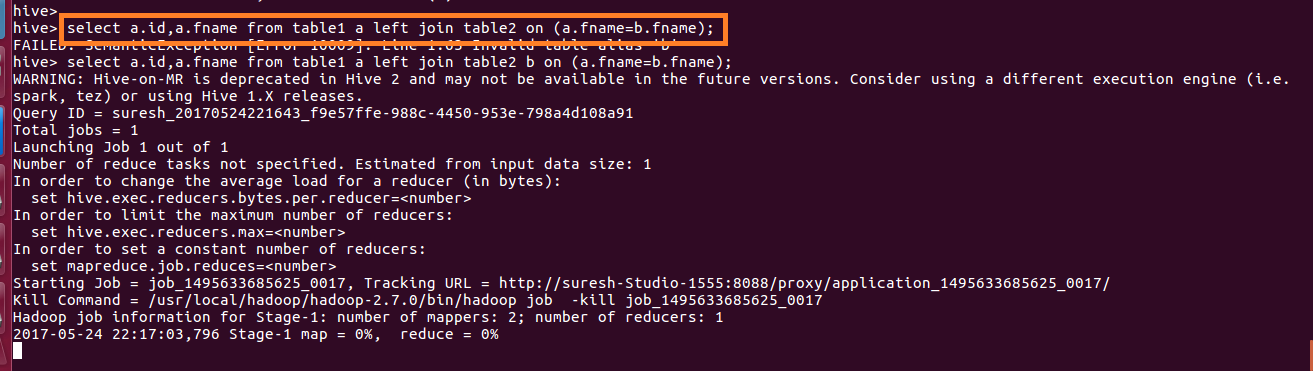
**SORT-MERGE BUCKET MAP JOIN:**



**Output:**



**Left Semi Join:**



**Output:**

