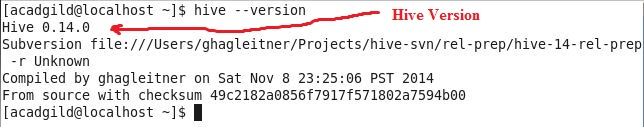
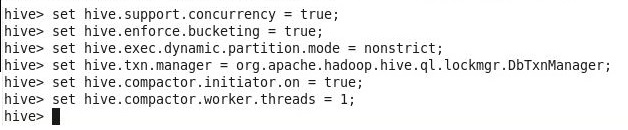
**Transactions in Hive**

**NOTE: Before working in hive shell, start all hadoop daemons using start-all.sh command, and start mysqld service using sudo service mysqld start, then launch hive using hive command.**

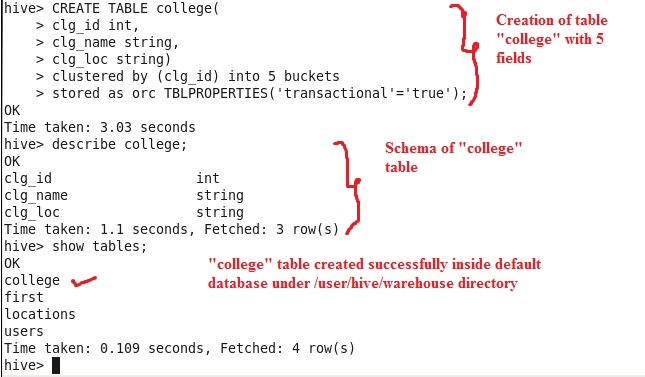
**Below steps are followed to work with transactions in Hive:**

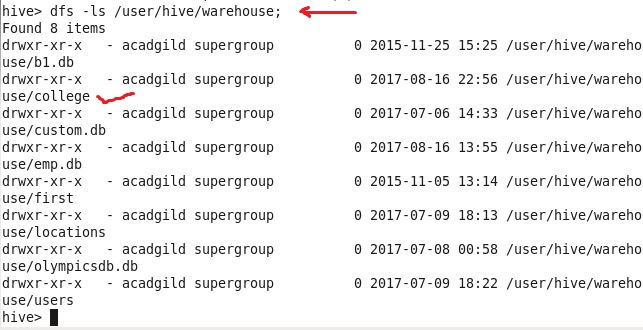
**Step 1: Check hive version, using following command:**

****

**Step 2: Below properties are set order-wise in order to work with transactions in Hive:**

**Step 3: Creation of table that supports Hive transactions**

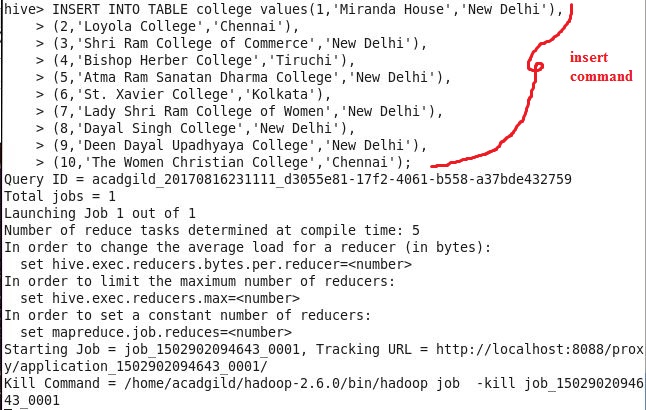
****

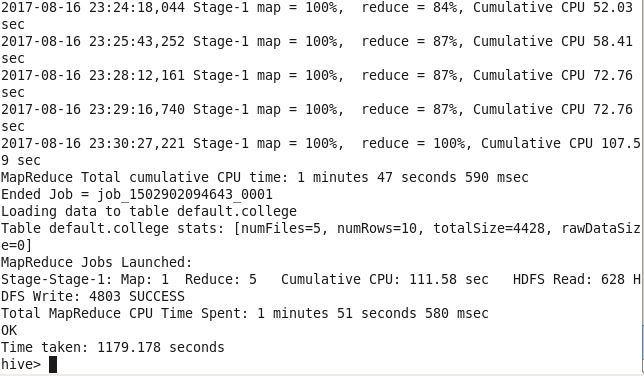
****

**Using above command besides “show tables” command, we can check “college” table is created successfully inside “/user/hive/warehouse” directory.**

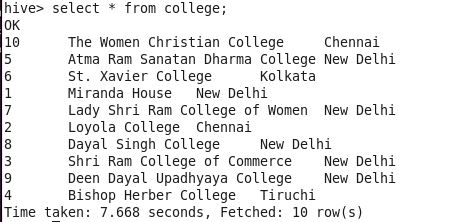
**Explanation of “create table” command:**

The above syntax creates a table with name ‘*college’* and the columns present in the table are ‘*clg\_id, clg\_name, clg\_loc’.* Table is being *bucketed* by ‘*clg\_id’* and the table format is ‘*orc’,* also transactions in table are enabled by specifying *‘transactional’=’true’* inside the *TBLPROPERTIES*.

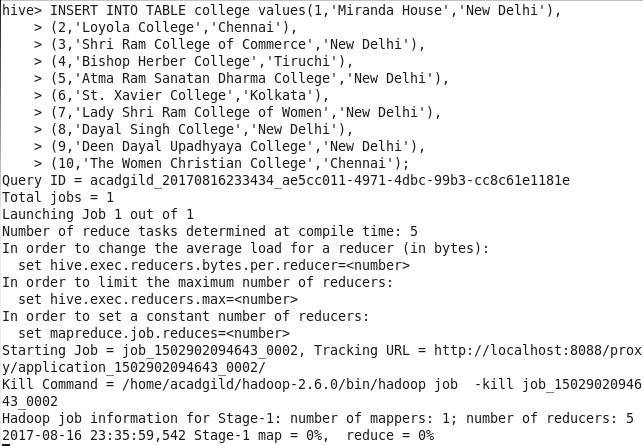
**Step 4: Inserting Data “row-wise” (each row separated by ()) into Hive Table “college”**

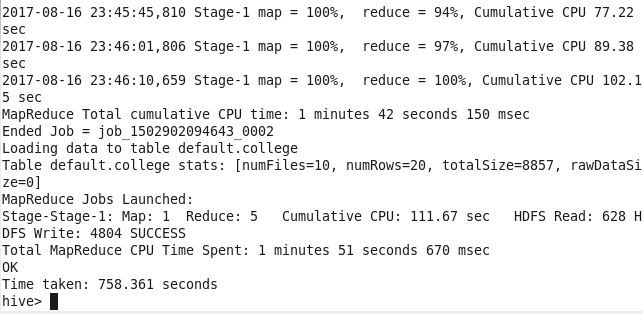


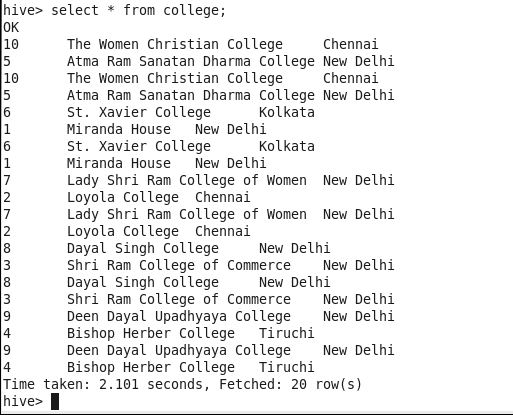
Data is inserted successfully, to check the data use below command.

****

If above insert command is fired once more, then data will get appended to the table, refer below three screenshots:

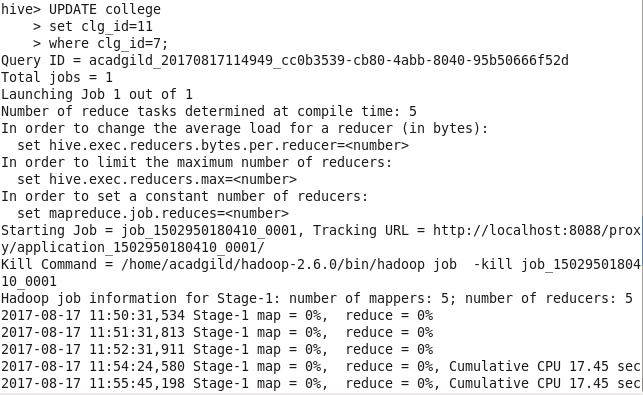


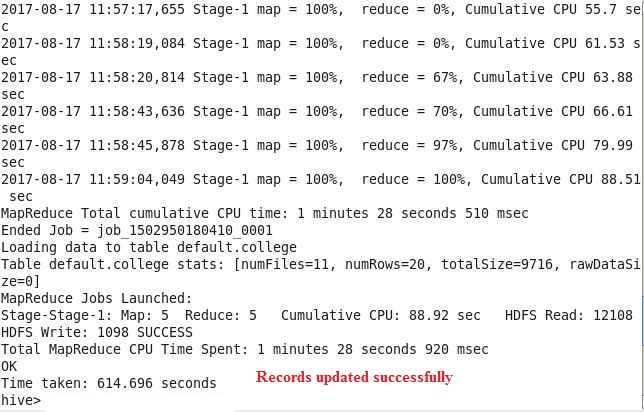




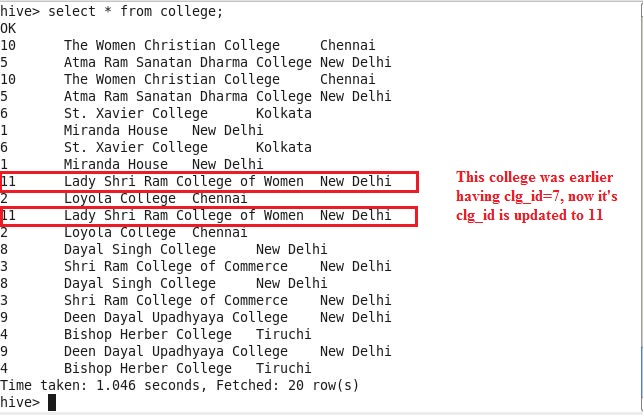
Output of above select command shows that data has got added in the “college” table

**Step 5: Updating the data in the Hive table “college”**

**CASE 1: Updating bucketed column i.e. clg\_id**

****

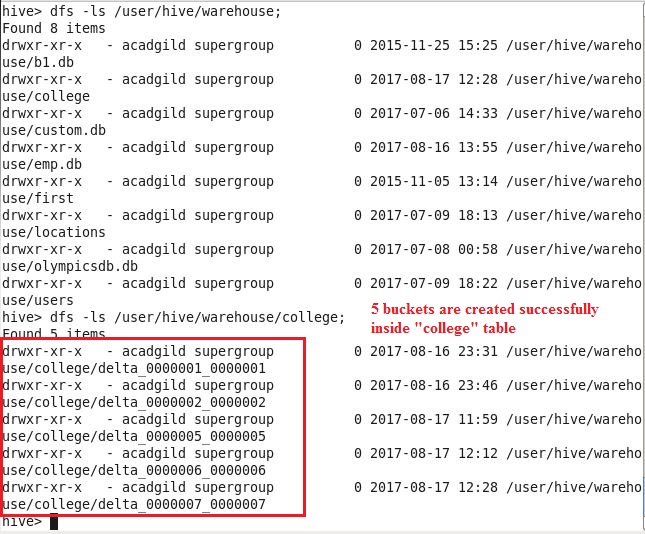
**Using select we can see records with clg\_id=7 have been updated to clg\_id=11**

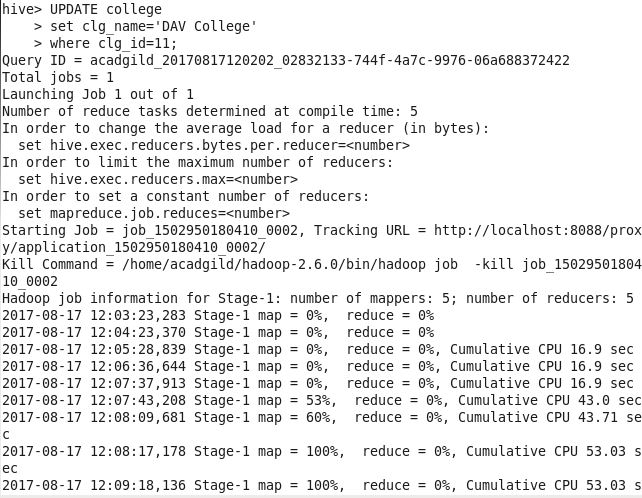
****

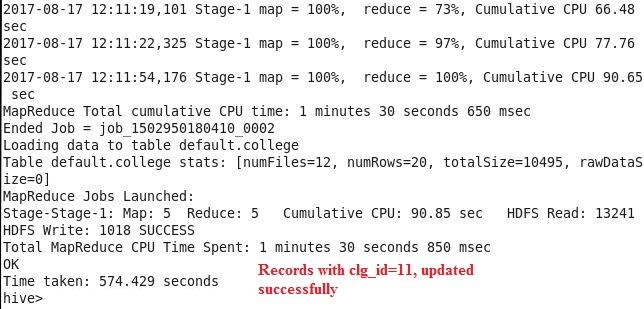
**Note: Above UPDATE command, updates all the rows with clg\_id=7 to clg\_id=11, however, it shouldn’t happen, because clg\_id is bucketed column and update command is not supported for columns that are bucketed, so below error would have been returned:**

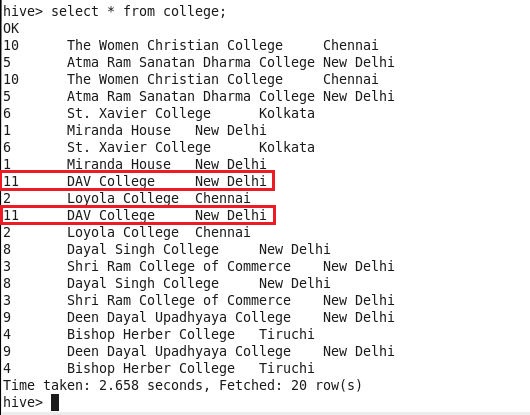
***FAILED: SemanticException[Error 10302]: Updating values of bucketing columns is not supported. Column clg\_id***

**Below screenshot shows that buckets are created inside “college” table for “clg\_id” column, still it allows update operation on this bucketed column**

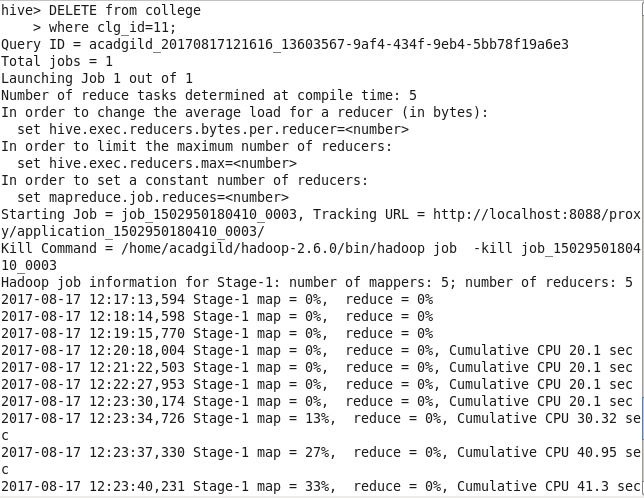


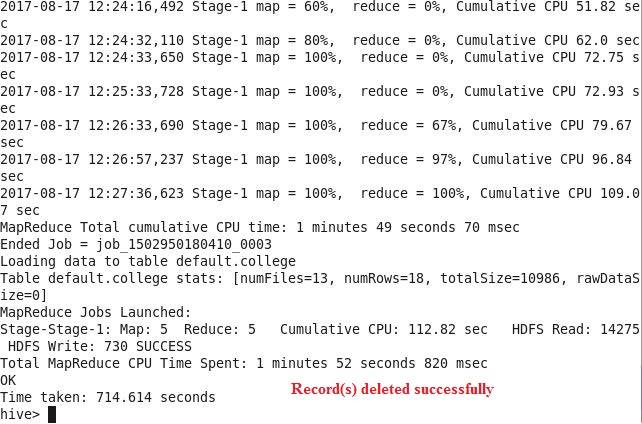
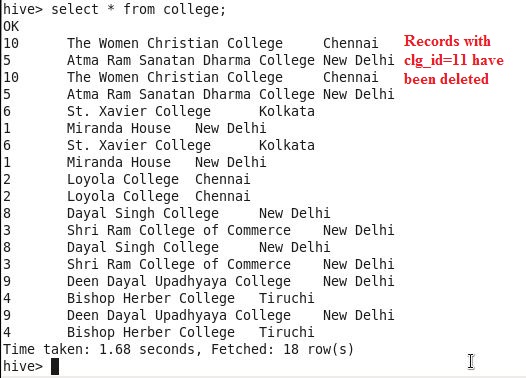
**CASE 2: Updating non-bucketed column i.e. clg\_name**

**Using select command, we can see records with clg\_id=11 have been updated with clg\_name= ‘DAV College’**

****

**Step 6: Deleting Row from Hive Table “college”**

****

**Using select command, we can see that records with clg\_id=11 deleted successfully**