

Start Hive:

```
[acadgild@localhost ~]$ hive
```

Below properties needs to be set appropriately in **hive shell**, order-wise to work with transactions in Hive:

```
set hive.support.concurrency = true;
```

```
set hive.enforce.bucketing = true;
```

```
set hive.exec.dynamic.partition.mode = nonstrict;
```

```
set hive.txn.manager = org.apache.hadoop.hive.ql.lockmgr.DbTxnManager;
```

```
set hive.compactor.initiator.on = true;
```

```
set hive.compactor.worker.threads = 4;
```

```
hive> set hive.support.concurrency = true;
hive> set hive.enforce.bucketing = true;
hive> set hive.exec.dynamic.partition.mode = nonstrict;
hive> set hive.txn.manager = org.apache.hadoop.hive.ql.lockmgr.DbTxnManager;
hive> set hive.compactor.initiator.on = true;
hive> set hive.compactor.worker.threads = 4;
```

Creating a Table That Supports Hive Transactions

```
CREATE TABLE college(clg_id int,clg_name string,clg_loc string) clustered by (clg_id)
into 5 buckets stored as orc TBLPROPERTIES('transactional'='true');
```

```
hive> CREATE TABLE college(clg_id int,clg_name string,clg_loc string) clustered by (clg_id) into 5 buckets stored as orc TBLPROPERTIES('transactional'='true');
OK
```

Inserting Data into a Hive Table

```
INSERT INTO table college
values(1,'nec','nlr'),(2,'vit','vlr'),(3,'srm','chen'),(4,'lpu','del'),(5,'stanford','uk'),(6,'JNTUA','atp'),(7,'cambridge','us');
```

```
hive> INSERT INTO table college values(1,'nec','nlr'),(2,'vit','vlr'),(3,'srm','chen'),(4,'lpu','del'),(5,'stanford','uk'),(6,'JNTUA','atp'),(7,'cambridge','us');
WARNING: Hive-on-MR is deprecated in Hive 2 and may not be available in the future versions. Consider using a different execution engine (i.e. spark, tez) or using Hive 1.X releases.
Query ID = acadgild_20180514220536_ac78883b-e15b-4615-880a-8c4a43ac47d0
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 5
```

Viewing the contents of table

*select * from college;*

```
hive> select * from college;
OK
5      stanford      uk
6      JNTUA      atp
1      nec      nlr
7      cambridge      us
2      vit      vlr
3      srm      chen
4      lpu      del
```

Time taken: 1.388 seconds, Fetched: 7 row(s)

Reinserting the data again to the table

```
hive> INSERT INTO table college values(1,'nec','nlr'),(2,'vit','vlr'),(3,'srm','chen'),(4,'lpu','del'),(5,'stanford','uk'),(6,'JNTUA','atp'),(7,'cambridge','us');
```

```
hive> select * from college;
OK
5      stanford      uk
5      stanford      uk
6      JNTUA      atp
1      nec      nlr
6      JNTUA      atp
1      nec      nlr
7      cambridge      us
2      vit      vlr
7      cambridge      us
2      vit      vlr
3      srm      chen
3      srm      chen
4      lpu      del
4      lpu      del
Time taken: 1.083 seconds, Fetched: 14 row(s)
```

Updating the Data in Hive Table

UPDATE college set clg_id = 8 where clg_id = 7;

```
hive> UPDATE college set clg_id = 8 where clg_id = 7;
FAILED: SemanticException [Error 10302]: Updating values of bucketing columns is not supported. Column clg_id.
```

UPDATE college set clg_name = 'IIT' where clg_id = 6;

```
hive> UPDATE college set clg_name = 'IIT' where clg_id = 6;
```

Deleting a Row from Hive Table

`delete from college where clg_id=5;`

```
Time taken: 200.091 seconds  
hive> delete from college where clg_id=5;
```

The updated and deleted data can be checked using the command ***select * from college***

```
hive> select * from college;  
OK  
6      IIT      atp  
1      nec      nlr  
6      IIT      atp  
1      nec      nlr  
7      cambridge      us  
2      vit      vlr  
7      cambridge      us  
2      vit      vlr  
3      srm      chen  
3      srm      chen  
4      lpu      del  
4      lpu      del  
Time taken: 1.289 seconds, Fetched: 12 row(s)
```