

HIVE operations

0. Hadoop start and enter command

```
docker container start -i hadoop;
```

1. Transfer file to hadoop file system

```
hdfs dfs -put /sagor/student.txt /sagor
```

2. Create a dummy table for inserting into Student partitioning table

```
CREATE EXTERNAL TABLE IF NOT EXISTS StudentDummy (  
    id int,  
    name STRING,  
    age INT,  
    Gender string  
)  
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','  
STORED AS TEXTFILE  
LOCATION '/data/output';
```

3. Load data to StudentDummy

```
LOAD DATA INPATH '/sagor/students.txt' INTO TABLE StudentDummy;
```

4. Create a partition table

```
CREATE EXTERNAL TABLE IF NOT EXISTS Student (  
    id int,  
    name STRING,  
    age INT  
)  
PARTITIONED BY (gender STRING)  
ROW FORMAT DELIMITED  
FIELDS TERMINATED BY ','  
STORED AS TEXTFILE  
LOCATION '/data/output';
```

5. Insert data to partitioned table (**Dynamic partition**)

```
SET hive.exec.dynamic.partition=true;
SET hive.exec.dynamic.partition.mode=nonstrict;

INSERT INTO TABLE Student PARTITION (gender)
SELECT id, name, age, gender FROM StudentDummy;
```

Not needed, step 5 do this work;

6. Insert class-1(male) data to Student table

```
INSERT INTO TABLE Student PARTITION (gender='male')
SELECT id, name, age FROM StudentDummy WHERE gender='male';
```

7. Insert class-2(female) data to Student table

```
INSERT INTO TABLE Student PARTITION (gender='female')
SELECT id, name, age FROM StudentDummy WHERE gender='female';
```

8. Test out Student table

```
Select * from Student;
```

```
Select *
```

```
Form Stud as a cross join Stud as b
```

```
Where a.gender='male' and b.gender='female' and a.age=b.age
```

