Assignment #1:

Create "ratings" managed table Load the data from

~/futurence_hadoop-pyspark/labs/dataset/movie/ratings.csv

Display the ratings data

Display rating wise count

```
CREATE TABLE IF NOT EXISTS RATINGS (userId int, movieId int, rating float, timestampRating int)

COMMENT 'Rating Details'

ROW FORMAT DELIMITED

FIELDS TERMINATED BY ','

LINES TERMINATED BY '\n'

STORED AS TEXTFILE;

LOAD DATA LOCAL INPATH

'/home/uttam/futurense-datengg-bootcamp/dataset/ratings.csv' OVERWRITE

INTO TABLE RATINGS;

SELECT * FROM RATINGS;
```

Select rating, count(*) From Ratings where rating IS NOT NULL Group By rating;

```
MapReduce Jobs Launched:
Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.31 sec HDFS Read: 2497468 HDFS Write: 301 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 310 msec
| rating | _c1
          1370
 0.5
 1.0
          2811
          1791
 1.5
          7551
 2.0
         | 5550
| 20047
| 13136
 3.0
 3.5
          26818
 4.5
          8551
 5.0
          13211
10 rows selected (20.706 seconds)
```

Assignment #2:

Create "weather" external table under /user/training/weather

Load the data from ~/futurence_hadoop-pyspark/labs/dataset/weather to
/user/training/weather

Display the weather data

Display Max, Min weather

Display month wise Max and Min weather

CREATE EXTERNAL TABLE IF NOT EXISTS weather (WBANNO int, LST_DATE DATE, CRX_VN FLOAT, LONGITUDE FLOAT, LATITUDE FLOAT, T_DAILY_MAX FLOAT, T_DAILY_MIN FLOAT, T_DAILY_MEAN FLOAT, T_DAILY_AVG FLOAT, P_DAILY_CALC FLOAT, SOLARAD_DAILY String, SUR_TEMP_DAILY_TYPE FLOAT, SUR_TEMP_DAILY_MAX FLOAT, SUR_TEMP_DAILY_MIN FLOAT, SUR_TEMP_DAILY_AVG FLOAT, RH_DAILY_MAX FLOAT, RH_DAILY_MIN FLOAT, RH_DAILY_AVG FLOAT, SOIL_MOISTURE_5_DAILY FLOAT, SOIL_MOISTURE_10_DAILY_FLOAT, SOIL_MOISTURE_50_DAILY_FLOAT, SOIL_MOISTURE_100_DAILY_FLOAT, SOIL_TEMP_5_DAILY_FLOAT, SOIL_TEMP_10_DAILY_FLOAT, SOIL_TEMP_20_DAILY_FLOAT, SOIL_TEMP_50_DAILY_FLOAT, SOIL_TEMP_10_DAILY_FLOAT, SOIL_TEMP_50_DAILY_FLOAT, SOIL_TEMP_100_DAILY_FLOAT)

COMMENT 'Weather Details'
ROW FORMAT DELIMITED
FIELDS TERMINATED BY '#'
LINES TERMINATED BY '#'
LOCATION '/user/training/weather';

LOAD DATA LOCAL INPATH

'/home/uttam/futurense-datengg-bootcamp/dataset/weather_data_formatted.txt'
OVERWRITE INTO TABLE weather;

select * from weather;

select max(t daily max), min(t daily min) from weather;

```
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 4.74 sec HDFS Read: 52352 HDFS Write: 109 SUCCESS Total MapReduce CPU Time Spent: 4 seconds 740 msec OK +-----+ | _c0 | _c1 | +-----+ | 36.0 | -7.9 | +-----+
```

select month(lst_date) as `Month`, max(t_daily_max) as `Max Temperature`,
min(t daily min) as `Min Temperature` from weather group by month(lst date);

| + month | max temperature | + min temperature | + |
|----------------------------------|-----------------|------------------------|-------|
| 1 | 26.5 | + -7 . 9 | † |
| j 2 | 26.6 | -3 . 5 | İ. |
| j 3 | 29.1 | -3.2 | İ |
| j 4 | 30.8 | 8.0 | Ĺ |
| 5 | 31.1 | 14.3 | Ĺ |
| 6 | 33.6 | 0.0 | Ĺ |
| 7 | 36.0 | 19.8 | П |
| + | | + | + |
| 7 rows selected (17.073 seconds) | | | |