CREATE PARTITIONS:

PARTITION ON A SINGLE COLUMN

EX1:

```
CREATE TABLE IF NOT EXISTS stocks_prt (
exch STRING,
symbol STRING,
ymd STRING,
price_open FLOAT,
price_high FLOAT,
price_low FLOAT,
price_close FLOAT,
volume INT,
price_adj_close FLOAT)
PARTITIONED BY (sym STRING)
ROW FORMAT DELIMITED FIELDS TERMINATED BY ',';
```

EX2:

```
create table stat_part(
age int,
gender string,
name string,
roll int,
marks string,
email string
)partitioned by (course string);
ROW FORMAT DELIMITED FIELDS TERMINATED BY ','
STORED AS ORC; (FOR ORC compression format)
```

PARTITION ON MULTIPLE COLUMNS:

```
CREATE TABLE IF NOT EXISTS stocks_par_multi (
exch STRING,
symbol STRING,
ymd STRING,
price_open FLOAT,
price_high FLOAT,
price_low FLOAT,
price_close FLOAT,
volume INT,
price_adj_close FLOAT)
 PARTITIONED BY (sym STRING, exc String, yr STRING)
ROW FORMAT DELIMITED FIELDS TERMINATED BY ',';
```

INSERT DATA ON STATIC PARTITIONED TABLE:

```
insert into table stat_part partition(course = 'DB') select age,gender,name,roll, marks,email from studentData where course = 'DB';
```

```
INSERT INTO TABLE stocks_prt partition(sym="ZZY") SELECT * FROM stocks WHERE symbol = "ZZY";
```

```
INSERT OVERWRITE TABLE stocks_par_multi
PARTITION (sym = 'GEL', exc = "ABCSE", yr=2018)
SELECT * FROM stocks WHERE symbol = 'GEL' and exch = "ABCSE" and Year(ymd) = 2018;
```

CREATE MULTIPLE PARTITIONS USING INSERT

```
FROM stocks s
INSERT INTO TABLE stocks_prt PARTITION(sym = "WUW")
SELECT s.* WHERE symbol="WUW"
INSERT INTO TABLE stocks_prt PARTITION(sym = "OKO")
SELECT s.* WHERE symbol="OKO"
INSERT INTO TABLE stocks_prt PARTITION(sym = "KSI")
SELECT s.* WHERE symbol="KSI"
INSERT INTO TABLE stocks_prt PARTITION(sym = "KJJ")
SELECT s.* WHERE symbol="KJJ";
```

FROM stocks s

INSERT OVERWRITE TABLE stocks_par_multi

PARTITION (sym = 'WOW', exc = "ABCSE", yr=2018)

SELECT s.* WHERE s.symbol = 'WOW' and s.exch = "ABCSE" and Year(s.ymd) = 2018

INSERT OVERWRITE TABLE stocks_par_multi

PARTITION (sym = 'OKO', exc = "ABCSE", yr=2018)

SELECT s.* WHERE s.symbol = 'OKO' and s.exch = "ABCSE" and Year(s.ymd) = 2018

INSERT OVERWRITE TABLE stocks_par_multi

PARTITION (sym = 'KSI', exc = "ABCSE", yr=2018)

SELECT s.* WHERE s.symbol = 'KSI' and s.exch = "ABCSE" and Year(s.ymd) = 2018

INSERT OVERWRITE TABLE stocks_par_multi

PARTITION (sym = 'KJJ', exc = "ABCSE", yr=2018)

SELECT s.* WHERE s.symbol = 'KJJ' and s.exch = "ABCSE" and Year(s.ymd) = 2018;

SELECT PARTIOTION USING WHERE CLAUSE:

SELECT * FROM stocks_partition WHERE sym='B7J';

ADD A PARTITION USING LOCATION:

ALTER TABLE stocks_prt ADD IF NOT EXISTS PARTITION (sym = 'ZUU') LOCATION 'output/hive/stocks-zuu';

ALTER TABLE stocks_par_multi ADD IF NOT EXISTS PARTITION(sym='WOW', exc='ABCSE', yr=2018) LOCATION '/user/hive/warehouse/practice_db.db/stocks_par_multi/sym=WOW/exc=ABCSE/yr=2018/000000_0';

DROP A PARTITION:

ALTER TABLE stocks_par_multi DROP IF EXISTS PARTITION(sym='WOW', exc='ABCSE', yr=2018);

ALTER TABLE stocks_prt DROP IF EXISTS PARTITION(sym = 'GEL');

SHOW PARTITIONS:

SHOW PARTITIONS stocks_prt;

ENABLE DYNAMIC PARTITIONS:

SET hive.exec.dynamic.partition=true;

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

DYNAMIC PARTITIONS TABLE:

EX1:

```
CREATE TABLE student_dyna_prt(
age int,
gender string,
name string,
course string,
roll int,
marks string,
email string)
PARTITIONED BY(courseP STRING, ageP STRING)
ROW FORMAT DELIMITED FIELDS TERMINATED BY '\t'
STORED AS ORC;

INSERT INTO TABLE student_dyna_prt PARTITION (courseP, ageP) SELECT *, couse, age from student;
```

EX2:

```
CREATE TABLE IF NOT EXISTS stocks_dynamic_partition (
exch STRING,
symbol STRING,
ymd STRING,
price_open FLOAT,
price_high FLOAT,
price_low FLOAT,
price_close FLOAT,
volume INT,
price_adj_close FLOAT)
PARTITIONED BY (exch_name STRING, yr STRING, sym STRING)
ROW FORMAT DELIMITED FIELDS TERMINATED BY ',';

INSERT OVERWRITE TABLE stocks_dynamic_partition
PARTITION (exch_name='ABCSE', yr, sym)
SELECT *, year(ymd), symbol
FROM stocks;
```

```
INSERT OVERWRITE TABLE stocks_dynamic_partition
PARTITION (exch_name='ABCSE', yr, sym)
SELECT *, year(ymd), symbol
FROM stocks WHERE year(ymd) IN ('2001', '2002', '2003') and symbol like 'B%';
```

ACCESSING DYNAMIC PARITIONS:

```
SELECT * FROM stocks_dynamic_partition
WHERE yr=2003 and volume > 10000;
```

--Set the number of partitions per node.

```
hive> SET hive.exec.max.dynamic.partitions=1000;
hive> SET hive.exec.max.dynamic.partitions.pernode=500;
```

LOAD ORC FILE INTO TABLE

```
CREATE TABLE st(
age int,
gender string,
name string,
course string,
roll int,
marks string,
email string)
STORED AS ORC;

LOAD DATA INPATH '/user/hive/warehouse/practice_db.db/student_dyna_prt/coursep=Cloud/agep=28/000000_0' INTO TABLE st;
```