

Data: > https://github.com/shashank-mishra219/Hive-Class/blob/main/sales_order_data.csv

1) Store raw data into hdfs location.

Solution:

To store raw data in hdfs location we have to use this command.

My data is stored in local system (location of data in my system is on desktop) and I am storing this data in hdfs root directory location.

Syntax: `hdfs fs -copyFromLocal localsystemlocation location data to stored`

Command: `hdfs fs -copyFromLocal Desktop/sales_order_csv /`

2) Create an internal hive table "sales_order_csv" which will store csv data sales_order_csv ... make sure to skip header row while creating table.

Solution:

To create an internal hive table of sales_order_csv, we have to use the following command.

```
create table sales_order_csv (  
    ordernumber int, quantityordered int, priceeach int, orderlinenumber int, sales int, status string, qtr_id int, month_id int, year_id int,  
    productline int, msrp int, productcode string, phone string, city string, state string, postalcode string, country string, territory string,  
    contactlastname string, contactfirstname string, dealsize string) row format delimited terminated by ',' stored as text;
```

3) Load data from hdfs path into "sales_order_csv".

Solution:

To load data from hdfs path into sales_order_csv we have use the following command:

Command: `load data inpath '/sales_order_csv' into table sales_order_csv`

4) Create an internal hive table which will store data in ORC format "sales_order_orc"

Solution:

```
create table sales_order_orc (  
    ordernumber int, quantityordered int, priceeach int, orderlinenumber int, sales int, status string, qtr_id int, month_id int, year_id int,  
    productline int, msrp int, productcode string, phone string, city string, state string, postalcode string, country string, territory string,  
    contactlastname string, contactfirstname string, dealsize string) row format delimited terminated by ',' stored as orc;
```

5) Load data from "sales_order_csv" into "sales_order_orc"

Solution: `insert overwrite table sales_order_orc select * from sales_order_csv;`

6) Perform below mentioned queries on "sales_order_orc" table

a. Calculate total sales per year

```
select year_id, sum(sales) from sales_order_orc group by year_id;
```

b. Find a product for which maximum orders were placed

```
select product_line, sum(quantityordered) as maxordered from sales_order_orc group by product_line  
order by maxordered desc limit 1;
```

c. Calculate the total sales for each quarter

```
select qtr_id, sum(sales) from sales_order_orc group by qtr_id;
```

d. In which quarter sales was minimum

```
select qtr_id, sum(sales) from sales_order_orc group by qtr_id order by qtr_id asc limit 1;
```

e. In which country sales was maximum and in which country sales was minimum

```
select country, sum(sales) as tot_sales from sales_order_orc group by country order by tot_sales desc  
limit 1;
```

```
select country, sum(sales) as tot_sales from sales_order_orc group by country order by tot_sales asc  
limit 1;
```

f. Calculate quarterly sales for each city

```
select qtr_id,city sum(sales) as qtr_sales from sales_order_orc group by qtr_id,city order by  
qtr_sales;
```

g. Find a month for each year in which maximum number of quantities were sold

```
select month_id, year_id, sum(quantityordered) as qty from sales_order_orc where year_id = 2003  
group by year_id order by qty desc limit 1;
```

```
select month_id, year_id, sum(quantityordered) as qty from sales_order_orc where year_id = 2004  
group by year_id order by qty desc limit 1;
```

```
select month_id, year_id, sum(quantityordered) as qty from sales_order_orc where year_id = 2005  
group by year_id order by qty desc limit 1 ;
```