

Hive + HBase: OnlineRetail Dataset - Commands Only

i. Create and Load Table with Online Retail Data in Hive

```
CREATE DATABASE retail;

USE retail;

CREATE TABLE online_retail(invoice_no STRING, stock_code STRING, description STRING,
quantity INT, invoice_date STRING, unit_price FLOAT, customer_id STRING, country STRING)
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ','
STORED AS TEXTFILE;

LOAD DATA LOCAL INPATH '/home/cloudera/online_retail.csv' INTO TABLE online_retail;
```

j. Create Index on Online Retail Table

```
CREATE INDEX idx_customer_id
ON TABLE online_retail(customer_id)
AS 'COMPACT'
WITH DEFERRED REBUILD;
```

k. Find Total and Average Sales

```
SELECT SUM(quantity * unit_price) AS total_sales FROM online_retail;
SELECT AVG(quantity * unit_price) AS avg_sales FROM online_retail;
```

l. Find Order Details with Maximum Cost

```
SELECT invoice_no, MAX(quantity * unit_price) AS max_cost
FROM online_retail
GROUP BY invoice_no
ORDER BY max_cost DESC
LIMIT 1;
```

m. Find Customer Details with Maximum Order Total

```
SELECT customer_id, SUM(quantity * unit_price) AS total_spent
FROM online_retail
GROUP BY customer_id
ORDER BY total_spent DESC
LIMIT 1;
```

n. Find the Country with Maximum and Minimum Sale

```
SELECT country, SUM(quantity * unit_price) AS total_sales
FROM online_retail
GROUP BY country
ORDER BY total_sales DESC
LIMIT 1;
```

```
SELECT country, SUM(quantity * unit_price) AS total_sales
FROM online_retail
GROUP BY country
ORDER BY total_sales ASC
LIMIT 1;
```

o. Create External Hive Table for HBase Integration

```
CREATE EXTERNAL TABLE hbase_online_retail(invoice_no STRING, description STRING,
quantity INT)
STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
WITH SERDEPROPERTIES("hbase.columns.mapping" = ":key,info:description,info:quantity")
TBLPROPERTIES("hbase.table.name" = "hbase_online_retail");
```

p. Display Records from OnlineRetail Table in HBase

```
INSERT OVERWRITE TABLE hbase_online_retail
SELECT invoice_no, description, quantity FROM online_retail;

SELECT * FROM hbase_online_retail;
```