

STEP 1:

New database creation

```
postgres=# create database tink;
CREATE DATABASE
postgres=# \l
```

Name Access privileges	Owner	Encoding	List of databases Collate	Ctype
challenge	postgres	UTF8	English_India.1252	English_India.1252
codechallenge	postgres	UTF8	English_India.1252	English_India.1252
devuser	postgres	UTF8	English_India.1252	English_India.1252
dvdrental	postgres	UTF8	English_India.1252	English_India.1252
postgres	postgres	UTF8	English_India.1252	English_India.1252
template0	postgres	UTF8	English_India.1252	English_India.1252
=c/postgres	+			
postgres=C/c/postgres				
template1	postgres	UTF8	English_India.1252	English_India.1252
=c/postgres	+			
postgres=C/c/postgres				
tink	postgres	UTF8	English_India.1252	English_India.1252

```
(8 rows)

postgres=#
```

STEP 2:

Create ONLINE Transaction Table

```
tink=# CREATE TABLE ONLINE_ORDER (
tink=# customer_id INTEGER NOT NULL,
tink=# order_id INTEGER NOT NULL,
tink=# Shop_id INTEGER NOT NULL,
tink=# order_mode VARCHAR(7) default 'ONLINE',
tink=# item VARCHAR(10),
tink=# brand VARCHAR(10),
tink=# order_value DECIMAL(12,2),
tink=# timestampvalue varchar(14) default to_char(current_timestamp, 'yyyymmddHH
ssmm'),
tink=# order_date varchar(8) default to_char(current_timestamp, 'yyyymmdd'),
tink=# PRIMARY KEY(customer_id, order_id,Shop_id));
CREATE TABLE
tink=# select * from online_order;
 customer_id | order_id | shop_id | order_mode | item | brand | order_value | ti
mestampvalue | order_date
-----+-----+-----+-----+-----+-----+-----+-----
(0 rows)
```

STEP 3:

Create Master Table

```
tink=# CREATE TABLE MASTER_ORDER (
tink=# customer_id INTEGER NOT NULL,
tink=# order_id INTEGER NOT NULL,
tink=# Shop_id INTEGER NOT NULL,
tink=# order_mode VARCHAR(7),
tink=# item VARCHAR(10),
tink=# brand VARCHAR(10),
tink=# order_value DECIMAL(12,2),
tink=# timestampvalue varchar(14),
tink=# order_date varchar(8),
tink=# PRIMARY KEY(customer_id, Shop_id));
CREATE TABLE
tink=# select * from master_order;
 customer_id | order_id | shop_id | order_mode | item | brand | order_value | ti
timestampvalue | order_date
-----+-----+-----+-----+-----+-----+-----+-----
<0 rows>

tink=#
```

STEP 4:

Delta table creation

```
tink=# create table delta_order as select * from master_order;
SELECT 0
tink=#
```

STEP 5:

Create and Load sample data into Master & online_order table

```
tink=# select * from online_order;
 customer_id | order_id | shop_id | order_mode | item | brand | order_val
ue | timestampvalue | order_date
-----+-----+-----+-----+-----+-----+-----+-----
75 | 1001 | 2001 | 3001 | ONLINE | alarm | bosch | 9393.
50 | 1003 | 2003 | 3003 | ONLINE | light | siemens | 9412.
88 | 1007 | 2007 | 3007 | ONLINE | alexa | apple | 6296.
13 | 1002 | 2002 | 3002 | ONLINE | conn v | cummins | 9403.
88 | 1004 | 2004 | 3004 | ONLINE | conn fri | bosch | 9421.
63 | 1006 | 2006 | 3006 | ONLINE | flr clnr | samsung | 9440.
00 | 1008 | 2008 | 3008 | ONLINE | conn door | bolt | 3150.
(7 rows)
```

STEP 6:

Delta and Master table contents

```
tink=# alter table master_order add column DispatchStatus varchar(14);
ALTER TABLE
tink=# select * from master_order;
```

	customer_id	order_id	shop_id	order_mode	item	brand	order_value	timestampvalue	order_date	dispatchstatus
50	6002	7002	8002	SHOP	net	cummins	56287.	20191022061023	20191022	NOT DISPATCHED
88	6003	7003	8003	SHOP	bearing	siemens	56296.	20191021091053	20191021	DISPATCHED
25	6004	7004	8004	SHOP	screw	bosch	56306.	20191022041014	20191022	NOT DISPATCHED
63	6005	7005	8005	SHOP	sensor	BGR	56315.	20191022051020	20191022	DISPATCHED
88	6006	7006	8006	SHOP	cleaner	samsung	37546.	20191021091048	20191021	NOT DISPATCHED
00	6007	7007	8007	SHOP	siri	apple	18775.	20191022011048	20191022	DISPATCHED
75	6008	7008	8008	SHOP	Assistant	bolt	23647.	20191021091048	20191021	NOT DISPATCHED
75	1001	2001	3001	ONLINE	alarm	bosch	9393.	20191022095110	20191022	DISPATCHED
50	1003	2003	3003	ONLINE	light	siemens	9412.	20191022095110	20191022	DISPATCHED
88	1007	2007	3007	ONLINE	alexa	apple	6296.	20191022095110	20191022	DISPATCHED
13	1002	2002	3002	ONLINE	conn v	cummins	9403.	20191022093410	20191022	NOT DISPATCHED
88	1004	2004	3004	ONLINE	conn fri	bosch	9421.	20191022093410	20191022	NOT DISPATCHED
63	1006	2006	3006	ONLINE	flr clnr	samsung	9440.	20191022093410	20191022	NOT DISPATCHED
00	1008	2008	3008	ONLINE	conn door	bolt	3150.	20191022093510	20191022	NOT DISPATCHED

(14 rows)

Delta table contents:

```
tink=# alter table delta_order add column DispatchStatus varchar(14);
ALTER TABLE
tink=# select * from delta_order;
```

	customer_id	order_id	shop_id	order_mode	item	brand	order_value	timestampvalue	order_date	dispatchstatus
50	6002	7002	8002	SHOP	net	cummins	56287.	20191022061023	20191022	NOT DISPATCHED
88	6003	7003	8003	SHOP	bearing	siemens	56296.	20191021091053	20191021	DISPATCHED
25	6004	7004	8004	SHOP	screw	bosch	56306.	20191022041014	20191022	NOT DISPATCHED
63	6005	7005	8005	SHOP	sensor	BGR	56315.	20191022051020	20191022	DISPATCHED
88	6006	7006	8006	SHOP	cleaner	samsung	37546.	20191021091048	20191021	NOT DISPATCHED
00	6007	7007	8007	SHOP	siri	apple	18775.	20191022011048	20191022	DISPATCHED
75	6008	7008	8008	SHOP	Assistant	bolt	23647.	20191021091048	20191021	NOT DISPATCHED
75	1001	2001	3001	ONLINE	alarm	bosch	9393.	20191022095110	20191022	DISPATCHED
50	1003	2003	3003	ONLINE	light	siemens	9412.	20191022095110	20191022	DISPATCHED
88	1007	2007	3007	ONLINE	alexa	apple	6296.	20191022095110	20191022	DISPATCHED
13	1002	2002	3002	ONLINE	conn v	cummins	9403.	20191022093410	20191022	NOT DISPATCHED
88	1004	2004	3004	ONLINE	conn fri	bosch	9421.	20191022093410	20191022	NOT DISPATCHED
63	1006	2006	3006	ONLINE	flr clnr	samsung	9440.	20191022093410	20191022	NOT DISPATCHED

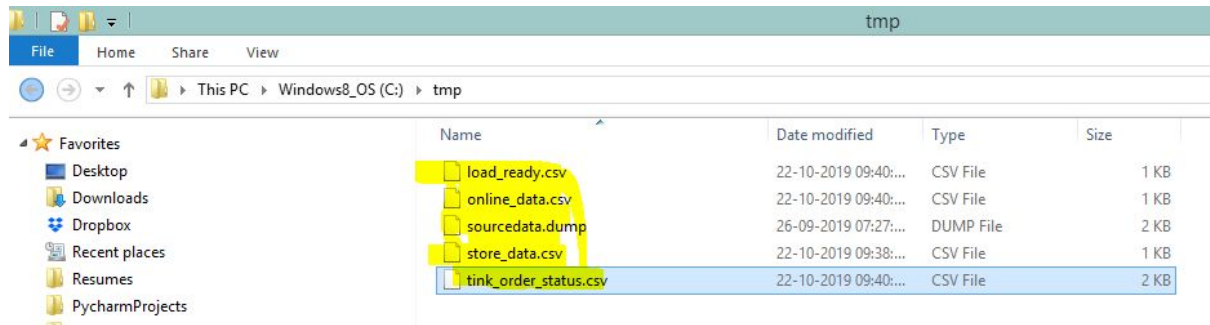
(0 rows)

```
tink=# select * from delta_order;
```

	customer_id	order_id	shop_id	order_mode	item	brand	order_value	timestampvalue	order_date	dispatchstatus
50	6002	7002	8002	SHOP	net	cummins	56287.	20191022061023	20191022	NOT DISPATCHED
88	6003	7003	8003	SHOP	bearing	siemens	56296.	20191021091053	20191021	DISPATCHED
25	6004	7004	8004	SHOP	screw	bosch	56306.	20191022041014	20191022	NOT DISPATCHED
63	6005	7005	8005	SHOP	sensor	BGR	56315.	20191022051020	20191022	DISPATCHED
88	6006	7006	8006	SHOP	cleaner	samsung	37546.	20191021091048	20191021	NOT DISPATCHED
00	6007	7007	8007	SHOP	siri	apple	18775.	20191022011048	20191022	DISPATCHED
75	6008	7008	8008	SHOP	Assistant	bolt	23647.	20191021091048	20191021	NOT DISPATCHED
75	1001	2001	3001	ONLINE	alarm	bosch	9393.	20191022095110	20191022	DISPATCHED
50	1003	2003	3003	ONLINE	light	siemens	9412.	20191022095110	20191022	DISPATCHED
88	1007	2007	3007	ONLINE	alexa	apple	6296.	20191022095110	20191022	DISPATCHED
13	1002	2002	3002	ONLINE	conn v	cummins	9403.	20191022093410	20191022	NOT DISPATCHED
88	1004	2004	3004	ONLINE	conn fri	bosch	9421.	20191022093410	20191022	NOT DISPATCHED
63	1006	2006	3006	ONLINE	flr clnr	samsung	9440.	20191022093410	20191022	NOT DISPATCHED

STEP 7:

Storing data in files for downstream processing/Adhoc load/Data integrity analysis in the server:



STEP 8:

Visualization

Frequency of brands ordered in Online Vs Offline

