### STEP 1:

New database creation

```
postgres=# create database tink;
<mark>CREATE DATABASE</mark>
postgres=# \1
                                                 List of databases
Collate !
     Name
                   Owner
                              ! Encoding !
                                                                           Ctype
   Access privileges
challange
                 | postgres | UTF8
                                          | English_India.1252 | English_India.1252
                                          | English_India.1252 | English_India.1252
codechallange | postgres | UTF8
devuser
                 | postgres | UTF8
                                          | English_India.1252 | English_India.1252
dvdrental
                 | postgres | UTF8
                                          | English_India.1252 | English_India.1252
                 | postgres | UTF8
                                          | English_India.1252 | English_India.1252
postgres
                 | postgres | UTF8
                                          | English_India.1252 | English_India.1252
template0
 =c/postgres
postgres=CTc/postgres
template1 | postgr
                 | postgres | UTF8
                                          | English_India.1252 | English_India.1252
 =c/postgres
postgres=CTc/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(# item VARCHAR(10),
tink(# brand VARCHAR(10),
tink(# brand VARCHAR(10),
tink(# order_value DECIMAL (12,2),
tink(# order_value Varchar(14) default to_char(current_timestamp, 'yyyymmddHH
ssmm'),
tink(# order_date varchar(8) default to_char(current_timestamp, 'yyyymmdd'),
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:
   (Ø 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 UARCHAR(7),
tink(# item UARCHAR(10),
tink(# item UARCHAR(10),
tink(# brand UARCHAR(10),
tink(# order_value DECIMAL (12,2),
tink(# timestampvalue varchar(14),
tink(# order_date varchar(8),
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
mestampvalue | 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

```
item
                                                                                                                brand
                                                                                                                              | order_val
       1001 | 2001 | 3001 | ONLINE

20191022095110 | 20191022

1003 | 2003 | 3003 | ONLINE

20191022095110 | 20191022

1007 | 2007 | 3007 | ONLINE

20191022095110 | 20191022

1002 | 2002 | 3002 | ONLINE

20191022093410 | 20191022

1004 | 2004 | 3004 | ONLINE
                                                                                                                                        9393
                                                                                      | alarm
                                                                                                            bosch
                                                                                      ! light
                                                                                                            | siemens |
                                                                                                                                         9412
                                                                                                                                        6296
                                                                                      ! alexa
                                                                                                            ! apple
                                                                                                            | cummins |
                                                                                                                                        9403
                                                                                      conn v
13
        1004 | 2004 | 3
20191022093410 | 20191022
                                                    3004 | ONLINE
                                                                                                                                         9421
                                                                                      | conn fri
                                                                                                            bosch
88
    : 20191022093410 ; 20191022
1006 ; 2006 ; 3006 ; ONLINE
; 20191022093410 ; 20191022
1008 ; 2008 ; 3008 ; ONLINE
; 20191022093510 ; 20191022
                                                                                      flr clnr
                                                                                                                                         9440.
                                                                                                            | samsung |
                                                                                      ! conn door ! bolt
                                                                                                                                         3150
                                                                                                                              H
    rows)
```

## STEP 6:

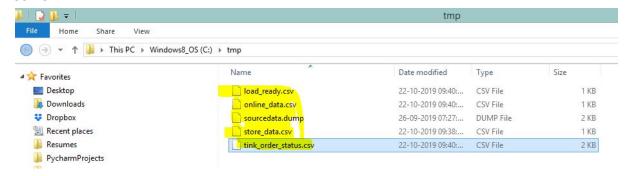
Delta and Master table contents

```
tink=# alter table master_order add column DispatchStatus varchar(14);
ALTER TABLE
item
                                                                         brand
                                                                                  | order_val
                                       | SHOP
                      -+-
7002 | 8002
| | 20191022
| 8003
     6002 |
20191022061023
                                                                                        56287.
                                                        ! net
                                                                        cummins !
                                        NOT DISPATCHED
50 1
                                                        bearing
                                                                                        56296
                                                                        siemens
                                        DISPATCHED
SHOP
         91021091053
                         20191
         6004 |
91022041014
                      7004 | 8
| 20191022
                                  8004
                                                                                        56306.
                                                                        bosch
                                                          screw
                                        NOT DISPATCHED
25
     201
                      7005 |
| 20191
                                  8005
                                                                        BGR
                                                                                        56315.
                                                        sensor
         91022051020
53
                                         DISPATCHED
                      7006 | 8
| 20191021
         6006 |
91021091048
                                  8006
                                          SHOP
                                                                                        37546.
                                                         cleaner
                                                                        samsung !
                                        NOT DISPATCHED
88
                      7007 | 8
| 20191022
     6007 |
20191022011048
                                  8007
                                                        siri
                                                                        apple
                                                                                        18775.
00
                                         DISPATCHED
                      7008 | 8
| 20191021
                                  8008
         6008 :
                                          SHOP
                                                        | Assistant
                                                                        bolt
                                                                                  ł
                                                                                        23647.
                                        NOT DISPATCHED
75
     20191021091048
                      2001 |
         1001 :
                                  3001
                                                        alarm
                                                                        bosch
                                                                                         9393.
     20191022095110
                                        DISPATCHED ONLINE
75
                         20191022
     1003 | 2003 | 3
20191022095110 | 20191022
                                  3003
                                                        | light
                                                                      ! siemens !
                                                                                         9412.
                                        DISPATCHED ONLINE
50
     1007 | 2007 | 3
20191022095110 | 20191022
                                  3007
                                                        | alexa
                                                                      ! apple
                                                                                         6296.
                                        DISPATCHED ONLINE
88
     1002 | 2002 | 3
20191022093410 | 20191022
                                  3002
                                                        l conn v
                                                                      | cummins |
                                                                                         9403.
                                        NOT DISPATCHED
13
                      2004
     1004 | 2004 |
20191022093410 | 20191
                                  3004
                                                        l conn fri
                                                                        bosch
                                                                                         9421.
88
                                        NOT DISPATCHED
ONLINE
                                         NOT DISPA
                                                     CHED
     1006 | 2006 | 3
20191022093410 | 20191022
                                  3006
                                                                        samsung !
                                                                                         9440.
                                       ı
63
                                       ONLINE :
                      2008 1
                                  3008
                                                                                         3150.
         1008 :
                                                        | conn door |
                                                                        bolt
     20191022093510 | 20191022
```

#### Delta table contents:

```
tink=# alter table delta_order add column DispatchStatus varchar(14);
ALTER TABLE
tink=# select * from delta_order;
tink=# select * from delta_order;
customer_id | order_id | shop_id | order_mode | item | brand | order_value | t:
mestampvalue | order_date | dispatchstatus
(0 rows)
item
                                                                                   brand
                                                                                              | order_val
                                       8002 | SHOP
22 | NOT DISPATO
8003 | SHOP
21 | DISPATCHED
8004 | SHOP
22 | NOT DISPATO
           6002 |
                          7002 |
                                                                | net
                                                                                  cummins !
                                                                                                    56287
      20191022061023
6003 |
                          1 20191022
50
                                                    DISPATCHED
                          7003 1
                                                                bearing
                                                                                | siemens |
                                                                                                    56296
                                      20191021091053
88
                          1 20191
                          7004 1
                                                                screw
           6004 1
                                                                                  bosch
                                                                                                    56306
      20191022041014
25
                          1 2019
                                                    DISPATCHED
                          7005 1
           6005 1
                                                                sensor
                                                                                ! BGR
                                                                                                    56315
      20191022051020
                          1 20191022
                          7006 1
                                       SHOP
1 NOT D
8007 | SHOP
2 | DISP
           6006
                                                                 cleaner
                                                                                  samsung !
                                                                                                    37546
                          | 20191021
7007 | 8
| 20191022
88
      20191021091048
                                                    DISPATCHED
      6007 |
20191022011048
                                       ! siri
                                                                                apple
                                                                                                    18775
00
                          7008 1
           6008
                                                                 Assistant
                                                                                                    23647
                                                    DISPATCHED
      201
           91021091048
                           1 20191
      1001 |
20191022095110
                         2001
                                                                ! alarm
                                                                                bosch
                                                                                                      9393
                           1 20191022
                                            ONLINE
ONLINE
ONLINE
ONLINE
ONLINE
           1003
                         2003 1
                                                                light
                                                                                  siemens !
                                                                                                      9412
                         2007 |
2007 |
1 20191
2002 |
50
           910220951
                       10
          1007 |
91022095110
                                       3007
                                                                | alexa
                                                                                                      6296
                                                                                apple
                                              DISPATCHED ONLINE
      201
      1002 ;
20191022093410 ; 201
20191022093410 ; 2004 ;
                                       3002
                                                                                                      9403
                                                                  conn v
                                                                                  cummins
                                       3002 | ONLINE | 0
2 | NOT DISPATCHED
3004 | ONLINE | 0
2 | NOT DISPATCHED
                           2019
                                                                                bosch
                                                                                                      9421
                                                                l conn fri
      20191022093410 | 20191022
                                               NOT DISPATCHED
```

# **STEP 7:**Storing data in files for downstream processing/Adhoc load/Data integrity analysis int he



STEP 8: Visualization

