**Understand the commonly used Data Models to build DWH**

**1.Identify the given data model and briefly explain about it.**

● The given data model is of Snowflake Schema.

● The snowflake schema is an expansion of the star schema where each point of the star explodes into more points.

● It is called snowflake schema because the diagram of snowflake schema resembles a snowflake.

Snowflaking is a method of normalizing the dimension tables in a STAR schemas.

● When we normalize all the dimension tables entirely, the resultant structure resembles a snowflake with the fact table in the middle.

● The snowflake schema consists of one fact table which is linked to many dimension tables,

which can be linked to other dimension tables through a many-to-one relationship.

● Tables in a snowflake schema are generally normalized to the third normal form. Each dimension table performs exactly one level in a hierarchy.

**2. Understand how to set the dependencies during Stage tables and Target Tables load?**

● Here in the stage model collect the data from stage tables.

● By checking the primary key conditions we have to set the primary keys for tables.

● Remove all the redundancy data from tables.

● after remove all redundancy data we have to set the foreign keys.

● then we have to load the data from source tables to target tables.

● this process called ETL(Extract Load Transform).

**3.What are common issues with this model?**

Advantages:

* Due to normalization in the Snowflake schema, the redundancy is reduced and therefore, it becomes easy to maintain and the save storage space.

Disadvantage:

* Harder to design compared to a star schema.
* The primary disadvantage of the snowflake schema is the additional maintenance efforts required due to the increasing number of lookup tables.It is also known as a multi fact star schema.
* More tables more join so more query execution time.

**4.Are there any options to convert this model to STAR? If SO,how?**

●Yes the given model can be converted to STAR Schema.

●The snowflake schema is an extension of a star schema.

●Snowflaking is a method of normalizing the dimension tables in a STAR schemas.

●When we normalize all the dimension tables entirely, the resultant structure resembles a snowflake with the fact table in the middle.

**Create stage tables: Provide all insert scripts:**

1. create table KPI\_STG\_CHANNEL(

DATE\_CREATED date not null,

IS\_RECORD\_INACTIVE varchar2(10) not null,

LAST\_MODIFIED\_DATE date not null,

LIST\_ID number not null,

LIST\_ITEM\_NAME varchar2(20) not null );

1. create table KPI\_STG\_TRANSACTIONS (

TRANSACTION\_ID number ,

TRANID number,

TRANSACTION\_TYPE varchar2(250),

TRANDATE date,

CHANNEL\_ID number );

1. create table KPI\_STG\_ITEMS (

ITEM\_ID number, SKU varchar2(250),TYPE\_NAME varchar2(100),

SALESDESCRIPTION varchar2(250), CLASS\_ID number,

WS\_MERCHANDISE\_DEPARTMENT\_ID number,

WS\_MERCHANDISE\_COLLECTION\_ID number,

WS\_MERCHANDISE\_CLASS\_ID number,

WS\_MERCHANDISE\_SUBCLASS\_ID number );

1. create table KPI\_STG\_DEPARTMENTS (

DATE\_LAST\_MODIFIED date,

DEPARTMENT\_ID number,

ISINACTIVE varchar2(250),

NAME varchar2(10),

WS\_DESCRIPTION varchar2(250) );

1. create table KPI\_STG\_LOCATIONS (

LOCATION\_ID number, ADDRESS varchar2(250),

CITY varchar2(250), COUNTRY varchar2(250),

DATE\_LAST\_MODIFIED date, FULL\_NAME varchar2(250),

ISINACTIVE varchar2(250), NAME varchar2(250) );

1. create table KPI\_STG\_CLASSES (

CLASS\_ID number,

DATE\_LAST\_MODIFIED date,

FULL\_NAME varchar2(250),

ISINACTIVE varchar2(250),

NAME varchar2(250) );

1. create table KPI\_STG\_TRANSACTIONS\_LINES ( TRANSACTION\_ID number ,TRANSACTION\_LINE\_ID number ,LOCATION\_ID number, DEPARTMENT\_ID number,

ITEM\_ID number,AMOUNT number, COST number, UNITS number );

1. create table KPI\_STG\_ITEM\_MERCHANDISE\_DEPT (

ITEM\_MERCHANDISE\_DEPARTMENT\_ID number,

DESCRIPTION varchar2(250), ITEM\_MERCHANDISE\_DEPARTMENT\_NA varchar2(250) );

1. create table KPI\_STG\_ITEM\_MERCHANDISE\_COL(

ITEM\_MERCHANDISE\_COLLECTION\_ID number,

DESCRIPTION varchar2(250),

ITEM\_MERCHANDISE\_COLLECTION\_NA varchar2(250) );

1. create table KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL (

ITEM\_MERCHANDISE\_SUBCLASS\_ID number,

DESCRIPTION varchar2(250),

ITEM\_MERCHANDISE\_SUBCLASS\_NAME varchar2(250) );

1. create table KPI\_STG\_ITEM\_MERCH\_CLASS (

ITEM\_MERCHANDISE\_CLASS\_ID number,

DESCRIPTION varchar2(250),

ITEM\_MERCHANDISE\_CLASS\_NAME varchar2(250) );

Load the data in the tables:Provide the insert scripts:

→We Have loaded the data using the import data tool

→ Below some examples of insert scripts of all the tables

Insert into KPI\_STG\_LOCATIONS (LOCATION\_ID,ADDRESS,CITY,COUNTRY,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (2,'Singapore',null,'SG',to\_date('07-AUG-17','DD-MON-RR'),'Test Location','Yes','Test Location');

Insert into KPI\_STG\_LOCATIONS (LOCATION\_ID,ADDRESS,CITY,COUNTRY,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (3,'Singapore',null,'SG',to\_date('07-AUG-17','DD-MON-RR'),'Test Location 2','Yes','Test Location 2');

Insert into KPI\_STG\_LOCATIONS (LOCATION\_ID,ADDRESS,CITY,COUNTRY,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (4,'Australia',null,'AU',to\_date('07-AUG-17','DD-MON-RR'),'Test Location 4','Yes','Test Location 4');

Insert into KPI\_STG\_LOCATIONS (LOCATION\_ID,ADDRESS,CITY,COUNTRY,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (5,'07001 - WS NSW, Bondi Junction 472 Oxford Street Bondi Junction NSW 2022 Australia','Bondi Junction','AU',to\_date('07-AUG-17','DD-MON-RR'),'D07001 - WS NSW, Bondi Junction','Yes','D07001 - WS NSW, Bondi Junction');

Insert into KPI\_STG\_LOCATIONS (LOCATION\_ID,ADDRESS,CITY,COUNTRY,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (6,'07002 - PB NSW, Bondi Junction 470 Oxford Street Bondi Junction NSW 2022 Australia','Bondi Junction','AU',to\_date('07-AUG-17','DD-MON-RR'),'D07002 - PB NSW, Bondi Junction','Yes','D07002 - PB NSW, Bondi Junction');

Insert into KPI\_STG\_DEPARTMENTS (DATE\_LAST\_MODIFIED,DEPARTMENT\_ID,ISINACTIVE,NAME,WS\_DESCRIPTION) values (to\_date('25-SEP-15','DD-MON-RR'),1,'No','7001','Store WS NSW, Bondi Junction, 2/13 (7001)');

Insert into KPI\_STG\_DEPARTMENTS (DATE\_LAST\_MODIFIED,DEPARTMENT\_ID,ISINACTIVE,NAME,WS\_DESCRIPTION) values (to\_date('11-NOV-20','DD-MON-RR'),2,'No','7002','Store PB NSW, Bondi Junction, 2/13 (7002)');

Insert into KPI\_STG\_DEPARTMENTS (DATE\_LAST\_MODIFIED,DEPARTMENT\_ID,ISINACTIVE,NAME,WS\_DESCRIPTION) values (to\_date('11-NOV-20','DD-MON-RR'),3,'No','7003','Store PK NSW, Bondi Junction, 2/13 (7003)');

Insert into KPI\_STG\_DEPARTMENTS (DATE\_LAST\_MODIFIED,DEPARTMENT\_ID,ISINACTIVE,NAME,WS\_DESCRIPTION) values (to\_date('25-SEP-15','DD-MON-RR'),4,'No','7004','Store WE NSW, Bondi Junction, 2/13 (7004)');

Insert into KPI\_STG\_DEPARTMENTS (DATE\_LAST\_MODIFIED,DEPARTMENT\_ID,ISINACTIVE,NAME,WS\_DESCRIPTION) values (to\_date('18-DEC-12','DD-MON-RR'),5,'Yes','7211',null);

Insert into KPI\_STG\_CLASSES (CLASS\_ID, DATE\_LAST\_MODIFIED, FULL\_NAME,ISINACTIVE,NAME) values (1,to\_date('13-FEB-18','DD-MON-RR'),'WE', 'No', 'WE');

Insert into KPI\_STG\_CLASSES (CLASS\_ID, DATE\_LAST\_MODIFIED ,FULL\_NAME,ISINACTIVE,NAME) values (3,to\_date('13-JUN-13','DD-MON-RR'),'PT', 'No', 'PT');

Insert into KPI\_STG\_CLASSES (CLASS\_ID,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (4,to\_date('13-JUN-13','DD-MON-RR'),'PB', 'No', 'PB');

Insert into KPI\_STG\_CLASSES (CLASS\_ID,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (5,to\_date('13-JUN-13','DD-MON-RR'),'PK', 'No', 'PK');

Insert into KPI\_STG\_CLASSES (CLASS\_ID,DATE\_LAST\_MODIFIED,FULL\_NAME,ISINACTIVE,NAME) values (6,to\_date('13-JUN-13','DD-MON-RR'),'WS','No','WS');

Insert into KPI\_STG\_TRANSACTIONS (TRANSACTION\_ID,TRANID,TRANSACTION\_TYPE,TRANDATE,CHANNEL\_ID)

values (185339066,'2186178','Sales Order',to\_date('01-SEP-21','DD-MON-RR'),2);

Insert into KPI\_STG\_TRANSACTIONS (TRANSACTION\_ID,TRANID,TRANSACTION\_TYPE,TRANDATE,CHANNEL\_ID)

values (185339085,'2186192','Sales Order',to\_date('01-SEP-21','DD-MON-RR'),2);

Insert into KPI\_STG\_TRANSACTIONS (TRANSACTION\_ID,TRANID,TRANSACTION\_TYPE,TRANDATE,CHANNEL\_ID)

values (185339701,'2186202','Sales Order',to\_date('01-SEP-21','DD-MON-RR'),2);

Insert into KPI\_STG\_TRANSACTIONS (TRANSACTION\_ID,TRANID,TRANSACTION\_TYPE,TRANDATE,CHANNEL\_ID)

values (185340234,'2186227','Sales Order',to\_date('01-SEP-21','DD-MON-RR'),2);

Insert into KPI\_STG\_TRANSACTIONS (TRANSACTION\_ID,TRANID,TRANSACTION\_TYPE,TRANDATE,CHANNEL\_ID)

values (185341664,'2186252','Sales Order',to\_date('01-SEP-21','DD-MON-RR'),2);

Insert into KPI\_STG\_TRANSACTION\_LINES (TRANSACTION\_ID,TRANSACTION\_LINE\_ID,LOCATION\_ID,DEPARTMENT\_ID,ITEM\_ID,AMOUNT,COST,UNITS) values (185352302,2,383,28,34049,5,0,1);

Insert into KPI\_STG\_TRANSACTION\_LINES (TRANSACTION\_ID,TRANSACTION\_LINE\_ID,LOCATION\_ID,DEPARTMENT\_ID,ITEM\_ID,AMOUNT,COST,UNITS) values (185356696,1,383,28,34049,5,0,1);

Insert into KPI\_STG\_TRANSACTION\_LINES (TRANSACTION\_ID,TRANSACTION\_LINE\_ID,LOCATION\_ID,DEPARTMENT\_ID,ITEM\_ID,AMOUNT,COST,UNITS) values (185359939,1,36,43,41572,166,0,1);

Insert into KPI\_STG\_TRANSACTION\_LINES (TRANSACTION\_ID,TRANSACTION\_LINE\_ID,LOCATION\_ID,DEPARTMENT\_ID,ITEM\_ID,AMOUNT,COST,UNITS) values (185360578,19,17,3,53525,9,0,1);

Insert into KPI\_STG\_TRANSACTION\_LINES (TRANSACTION\_ID,TRANSACTION\_LINE\_ID,LOCATION\_ID,DEPARTMENT\_ID,ITEM\_ID,AMOUNT,COST,UNITS) values (185361422,1,383,30,34049,5,0,1);

Insert into KPI\_STG\_CHANNEL (DATE\_CREATED,IS\_RECORD\_INACTIVE,LAST\_MODIFIED\_DATE,LIST\_ID,LIST\_ITEM\_NAME) values (to\_date('18-DEC-12','DD-MON-RR'),'F',to\_date('30-APR-13','DD-MON-RR'),1,'Retail');

Insert into KPI\_STG\_CHANNEL (DATE\_CREATED,IS\_RECORD\_INACTIVE,LAST\_MODIFIED\_DATE,LIST\_ID,LIST\_ITEM\_NAME) values (to\_date('18-DEC-12','DD-MON-RR'),'F',to\_date('30-APR-13','DD-MON-RR'),2,'DTC');

Insert into KPI\_STG\_CHANNEL (DATE\_CREATED,IS\_RECORD\_INACTIVE,LAST\_MODIFIED\_DATE,LIST\_ID,LIST\_ITEM\_NAME) values (to\_date('30-APR-13','DD-MON-RR'),'F',to\_date('30-APR-13','DD-MON-RR'),3,'Care Center');

Insert into KPI\_STG\_CHANNEL (DATE\_CREATED,IS\_RECORD\_INACTIVE,LAST\_MODIFIED\_DATE,LIST\_ID,LIST\_ITEM\_NAME) values (to\_date('07-MAY-13','DD-MON-RR'),'F',to\_date('07-MAY-13','DD-MON-RR'),4,'RTC');

Insert into KPI\_STG\_CHANNEL (DATE\_CREATED,IS\_RECORD\_INACTIVE,LAST\_MODIFIED\_DATE,LIST\_ID,LIST\_ITEM\_NAME) values (to\_date('06-AUG-15','DD-MON-RR'),'F',to\_date('14-AUG-15','DD-MON-RR'),5,'Wholesale');

Insert into KPI\_STG\_ITEMS (ITEM\_ID,SKU,TYPE\_NAME,SALESDESCRIPTION,CLASS\_ID,WS\_MERCHANDISE\_DEPARTMENT\_ID,WS\_MERCHANDISE\_COLLECTION\_ID,WS\_MERCHANDISE\_CLASS\_ID,WS\_MERCHANDISE\_SUBCLASS\_ID) values (1012,'1001809','Inventory Item','POCKETWATCHSmallMetalBronze',4,9,22,17,16);

Insert into KPI\_STG\_ITEMS (ITEM\_ID,SKU,TYPE\_NAME,SALESDESCRIPTION,CLASS\_ID,WS\_MERCHANDISE\_DEPARTMENT\_ID,WS\_MERCHANDISE\_COLLECTION\_ID,WS\_MERCHANDISE\_CLASS\_ID,WS\_MERCHANDISE\_SUBCLASS\_ID) values (2333,'4871018','Inventory Item','Basic Filled VotiveBox Of SixteenIvoryUnscented',4,28,47,38,42);

Insert into KPI\_STG\_ITEMS (ITEM\_ID,SKU,TYPE\_NAME,SALESDESCRIPTION,CLASS\_ID,WS\_MERCHANDISE\_DEPARTMENT\_ID,WS\_MERCHANDISE\_COLLECTION\_ID,WS\_MERCHANDISE\_CLASS\_ID,WS\_MERCHANDISE\_SUBCLASS\_ID) values (2340,'4884037','Inventory Item','PCKTWATCH ALARM CLKMetalBronze',4,9,22,17,16);

Insert into KPI\_STG\_ITEMS (ITEM\_ID,SKU,TYPE\_NAME,SALESDESCRIPTION,CLASS\_ID,WS\_MERCHANDISE\_DEPARTMENT\_ID,WS\_MERCHANDISE\_COLLECTION\_ID,WS\_MERCHANDISE\_CLASS\_ID,WS\_MERCHANDISE\_SUBCLASS\_ID) values (2945,'7109234','Inventory Item','Single Clip RingCast IronSmall',4,14,18,15,14);

Insert into KPI\_STG\_ITEMS (ITEM\_ID,SKU,TYPE\_NAME,SALESDESCRIPTION,CLASS\_ID,WS\_MERCHANDISE\_DEPARTMENT\_ID,WS\_MERCHANDISE\_COLLECTION\_ID,WS\_MERCHANDISE\_CLASS\_ID,WS\_MERCHANDISE\_SUBCLASS\_ID) values (2946,'7109531','Inventory Item','Single Clip RingAntique BronzeSmall',4,14,18,15,14);

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_DEPT (ITEM\_MERCHANDISE\_DEPARTMENT\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_DEPARTMENT\_NA) values (4,'PB BEDDING','203');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_DEPT (ITEM\_MERCHANDISE\_DEPARTMENT\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_DEPARTMENT\_NA) values (5,'WS CUTLERY','105');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_DEPT (ITEM\_MERCHANDISE\_DEPARTMENT\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_DEPARTMENT\_NA) values (6,'WE WINDOW','808');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_DEPT (ITEM\_MERCHANDISE\_DEPARTMENT\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_DEPARTMENT\_NA) values (7,'WS SAVORY FOOD','108');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_DEPT (ITEM\_MERCHANDISE\_DEPARTMENT\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_DEPARTMENT\_NA) values (8,'WE PILLOWS','810');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_COL (ITEM\_MERCHANDISE\_COLLECTION\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_COLLECTION\_NA) values (4,'PB ESSENTIALS BEDDING','PB1015');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_COL (ITEM\_MERCHANDISE\_COLLECTION\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_COLLECTION\_NA) values (5,'MODERN WIRE COLLECTION','MODERN WIRE COLLECTION');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_COL (ITEM\_MERCHANDISE\_COLLECTION\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_COLLECTION\_NA) values (6,'WE NEW LINEN COTTON GROMMET CURTAIN','WE7078');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_COL (ITEM\_MERCHANDISE\_COLLECTION\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_COLLECTION\_NA) values (7,'WE BULLS EYE PILLOW COVER','WE3386');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_COL (ITEM\_MERCHANDISE\_COLLECTION\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_COLLECTION\_NA) values (8,'PB HARRISON','PB159');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_CLASS (ITEM\_MERCHANDISE\_CLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_CLASS\_NAME) values (4,'SHEETS','1');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_CLASS (ITEM\_MERCHANDISE\_CLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_CLASS\_NAME) values (5,'WILLIAMS SONOMA','69');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_CLASS (ITEM\_MERCHANDISE\_CLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_CLASS\_NAME) values (6,'SOLID CURTAINS','7');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_CLASS (ITEM\_MERCHANDISE\_CLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_CLASS\_NAME) values (7,'VINEGARS','2');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_CLASS (ITEM\_MERCHANDISE\_CLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_CLASS\_NAME) values (8,'PATTERN + STRIPE PLW','3');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL (ITEM\_MERCHANDISE\_SUBCLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_SUBCLASS\_NAME) values (4,'LIGHT FILTERING','1');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL (ITEM\_MERCHANDISE\_SUBCLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_SUBCLASS\_NAME) values (5,'BALSAMIC','3');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL (ITEM\_MERCHANDISE\_SUBCLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_SUBCLASS\_NAME) values (6,'UNASSIGNED','1');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL (ITEM\_MERCHANDISE\_SUBCLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_SUBCLASS\_NAME) values (7,'WOVEN','1');

Insert into KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL (ITEM\_MERCHANDISE\_SUBCLASS\_ID,DESCRIPTION,ITEM\_MERCHANDISE\_SUBCLASS\_NAME) values (8,'ICON','1');

**Analyse the Business Keys if they meet Primary key conditions for all Stage tables**

**KPI\_STG\_CHANNEL**

SELECT COUNT(DISTINCT DATE\_CREATED) FROM KPI\_STG\_CHANNEL WHERE DATE\_CREATED IS NOT NULL;

4

SELECT COUNT(DISTINCT IS\_RECORD\_INACTIVE) FROM KPI\_STG\_CHANNEL WHERE IS\_RECORD\_INACTIVE IS NOT NULL;

1

SELECT COUNT(DISTINCT LAST\_MODIFIED\_DATE) FROM KPI\_STG\_CHANNEL WHERE LAST\_MODIFIED\_DATE IS NOT NULL;

3

SELECT COUNT(DISTINCT LIST\_ID), FROM KPI\_STG\_CHANNEL WHERE LIST\_ID IS NOT NULL;

5

SELECT COUNT(DISTINCT LIST\_ITEM\_NAME) FROM KPI\_STG\_CHANNEL WHERE LIST\_ITEM\_NAME IS NOT NULL;

5

**KPI\_STG\_CLASSES**

SELECT COUNT(CLASS\_ID) FROM KPI\_STG\_CLASSES;

SELECT COUNT(DISTINCT CLASS\_ID) FROM KPI\_STG\_CLASSES WHERE CLASS\_ID IS NOT NULL;

6

SELECT COUNT(DISTINCT DATE\_LAST\_MODIFIED) FROM KPI\_STG\_CLASSES WHERE DATE\_LAST\_MODIFIED IS NOT NULL;

3

SELECT COUNT(DISTINCT FULL\_NAME) FROM KPI\_STG\_CLASSES WHERE FULL\_NAME IS NOT NULL;

6

SELECT COUNT(DISTINCT ISINACTIVE) FROM KPI\_STG\_CLASSES WHERE ISINACTIVE IS NOT NULL;

1

SELECT COUNT(DISTINCT NAME) FROM KPI\_STG\_CLASSES WHERE NAME IS NOT NULL;

6

**KPI\_STG\_DEPARTMENTS**

SELECT COUNT(\*) FROM KPI\_STG\_DEPARTMENTS;

105

SELECT COUNT(DISTINCT DATE\_LAST\_MODIFIED) FROM KPI\_STG\_DEPARTMENTS WHERE DATE\_LAST\_MODIFIED IS NOT NULL;

39

SELECT COUNT(DISTINCT DEPARTMENT\_ID) FROM KPI\_STG\_DEPARTMENTS WHERE DEPARTMENT\_ID IS NOT NULL;

105

SELECT COUNT(DISTINCT ISINACTIVE) FROM KPI\_STG\_DEPARTMENTS WHERE ISINACTIVE IS NOT NULL;

2

SELECT COUNT(DISTINCT NAME) FROM KPI\_STG\_DEPARTMENTS WHERE NAME IS NOT NULL;

105

SELECT COUNT(DISTINCT WS\_DESCRIPTION) FROM KPI\_STG\_DEPARTMENTS WHERE WS\_DESCRIPTION IS NOT NULL;

100

**KPI\_STG\_ITEM\_MERCHANDISE\_CLASS**

SELECT COUNT(\*) FROM KPI\_STG\_ITEM\_MERCHANDISE\_CLASS;

83

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_CLASS\_ID) FROM KPI\_STG\_ITEM\_MERCHANDISE\_CLASS WHERE ITEM\_MERCHANDISE\_CLASS\_ID IS NOT NULL;

83

SELECT COUNT(DISTINCT DESCRIPTION) FROM KPI\_STG\_ITEM\_MERCHANDISE\_CLASS WHERE DESCRIPTION IS NOT NULL;

72

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_CLASS\_NAME) FROM KPI\_STG\_ITEM\_MERCHANDISE\_CLASS WHERE ITEM\_MERCHANDISE\_CLASS\_NAME IS NOT NULL;

17

**KPI\_STG\_ITEM\_MERCHANDISE\_COL**

SELECT COUNT(\*) FROM KPI\_STG\_ITEM\_MERCHANDISE\_COL;

86

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_COLLECTION\_ID) FROM KPI\_STG\_ITEM\_MERCHANDISE\_COL WHERE ITEM\_MERCHANDISE\_COLLECTION\_ID IS NOT NULL;

86

SELECT COUNT(DISTINCT DESCRIPTION) FROM KPI\_STG\_ITEM\_MERCHANDISE\_COL WHERE DESCRIPTION IS NOT NULL;

86

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_COLLECTION\_NA) FROM KPI\_STG\_ITEM\_MERCHANDISE\_COL WHERE ITEM\_MERCHANDISE\_COLLECTION\_NA IS NOT NULL;

86

**KPI\_STG\_ITEM\_MERCHANDISE\_DEPT**

SELECT COUNT(\*) FROM KPI\_STG\_ITEM\_MERCHANDISE\_DEPAR;

87

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_DEPARTMENT\_ID) FROM KPI\_STG\_ITEM\_MERCHANDISE\_DEPT WHERE ITEM\_MERCHANDISE\_DEPARTMENT\_ID IS NOT NULL;

87

SELECT COUNT(DISTINCT DESCRIPTION) FROM KPI\_STG\_ITEM\_MERCHANDISE\_DEPT WHERE DESCRIPTION IS NOT NULL;

87

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_DEPARTMENT\_NA) FROM KPI\_STG\_ITEM\_MERCHANDISE\_DEPT WHERE ITEM\_MERCHANDISE\_DEPARTMENT\_NA IS NOT NULL;

87

**KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL**

SELECT COUNT(\*) FROM KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL;

85

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_SUBCLASS\_ID) FROM KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL WHERE ITEM\_MERCHANDISE\_SUBCLASS\_ID IS NOT NULL;

85

SELECT COUNT(DISTINCT DESCRIPTION) FROM KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL WHERE DESCRIPTION IS NOT NULL;

53

SELECT COUNT(DISTINCT ITEM\_MERCHANDISE\_SUBCLASS\_NAME) FROM KPI\_STG\_ITEM\_MERCHANDISE\_SUBCL WHERE ITEM\_MERCHANDISE\_SUBCLASS\_NAME IS NOT NULL;

12

**KPI\_STG\_ITEMS**

SELECT COUNT(\*) FROM KPI\_STG\_ITEMS;

13101

SELECT COUNT(DISTINCT ITEM\_ID) FROM KPI\_STG\_ITEMS WHERE ITEM\_ID IS NOT NULL;

13098

SELECT COUNT(DISTINCT SKU) FROM KPI\_STG\_ITEMS WHERE SKU IS NOT NULL;

13097

SELECT COUNT(DISTINCT TYPE\_NAME) FROM KPI\_STG\_ITEMS WHERE TYPE\_NAME IS NOT NULL;

2

SELECT COUNT(DISTINCT SALESDESCRIPTION) FROM KPI\_STG\_ITEMS WHERE SALESDESCRIPTION IS NOT NULL;

13069

SELECT COUNT(DISTINCT CLASS\_ID) FROM KPI\_STG\_ITEMS WHERE CLASS\_ID IS NOT NULL;

4

SELECT COUNT(DISTINCT WS\_MERCHANDISE\_DEPARTMENT\_ID) FROM KPI\_STG\_ITEMS WHERE WS\_MERCHANDISE\_DEPARTMENT\_ID IS NOT NULL;

87

SELECT COUNT(DISTINCT WS\_MERCHANDISE\_COLLECTION\_ID) FROM KPI\_STG\_ITEMS WHERE WS\_MERCHANDISE\_COLLECTION\_ID IS NOT NULL;

3738

SELECT COUNT(DISTINCT WS\_MERCHANDISE\_CLASS\_ID) FROM KPI\_STG\_ITEMS WHERE WS\_MERCHANDISE\_CLASS\_ID IS NOT NULL;

457

SELECT COUNT(DISTINCT WS\_MERCHANDISE\_SUBCLASS\_ID) FROM KPI\_STG\_ITEMS WHERE WS\_MERCHANDISE\_SUBCLASS\_ID IS NOT NULL;

1240

**KPI\_STG\_LOCATIONS**

SELECT COUNT(\*) FROM KPI\_STG\_LOCATIONS;

114

SELECT COUNT(DISTINCT LOCATION\_ID) FROM KPI\_STG\_LOCATIONS WHERE LOCATION\_ID IS NOT NULL;

114

SELECT COUNT(DISTINCT ADDRESS) FROM KPI\_STG\_LOCATIONS WHERE ADDRESS IS NOT NULL; 112

SELECT COUNT(DISTINCT CITY) FROM KPI\_STG\_LOCATIONS WHERE CITY IS NOT NULL;

34

SELECT COUNT(DISTINCT COUNTRY) FROM KPI\_STG\_LOCATIONS WHERE COUNTRY IS NOT NULL;

5

SELECT COUNT(DISTINCT DATE\_LAST\_MODIFIED) FROM KPI\_STG\_LOCATIONS WHERE DATE\_LAST\_MODIFIED IS NOT NULL;

31

SELECT COUNT(DISTINCT FULL\_NAME) FROM KPI\_STG\_LOCATIONS WHERE FULL\_NAME IS NOT NULL;

114

SELECT COUNT(DISTINCT ISINACTIVE) FROM KPI\_STG\_LOCATIONS WHERE ISINACTIVE IS NOT NULL;

2

SELECT COUNT(DISTINCT NAME) FROM KPI\_STG\_LOCATIONS WHERE NAME IS NOT NULL;

114

**KPI\_STG\_TRANSACTIONS**

SELECT COUNT(\*) FROM KPI\_STG\_TRANSACTIONS;

43932

SELECT COUNT(DISTINCT TRANSACTION\_ID) FROM KPI\_STG\_TRANSACTIONS WHERE TRANSACTION\_ID IS NOT NULL;

43924

SELECT COUNT(DISTINCT TRANID) FROM KPI\_STG\_TRANSACTIONS WHERE TRANID IS NOT NULL;

43924

SELECT COUNT(DISTINCT TRANSACTION\_TYPE) FROM KPI\_STG\_TRANSACTIONS WHERE TRANSACTION\_TYPE IS NOT NULL;

2

SELECT COUNT(DISTINCT TRANDATE) FROM KPI\_STG\_TRANSACTIONS WHERE TRANDATE IS NOT NULL;

30

SELECT COUNT(DISTINCT CHANNEL\_ID) FROM KPI\_STG\_TRANSACTIONS WHERE CHANNEL\_ID IS NOT NULL;

4

**KPI\_STG\_TRANSACTIONS\_LINES**

SELECT COUNT(\*) FROM KPI\_STG\_TRANSACTIONS\_LINES;

147616

SELECT COUNT(DISTINCT TRANSACTION\_ID) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE TRANSACTION\_ID IS NOT NULL;

43924

SELECT COUNT(DISTINCT TRANSACTION\_LINE\_ID) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE TRANSACTION\_LINE\_ID IS NOT NULL;

187

SELECT COUNT(DISTINCT LOCATION\_ID) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE LOCATION\_ID IS NOT NULL;

20

SELECT COUNT(DISTINCT DEPARTMENT\_ID) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE DEPARTMENT\_ID IS NOT NULL;

33

SELECT COUNT(DISTINCT ITEM\_ID) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE ITEM\_ID IS NOT NULL;

13097

SELECT COUNT(DISTINCT AMOUNT) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE AMOUNT IS NOT NULL;

1416

SELECT COUNT(DISTINCT COST) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE COST IS NOT NULL;

1430

SELECT COUNT(DISTINCT UNITS) FROM KPI\_STG\_TRANSACTIONS\_LINES WHERE UNITS IS NOT NULL;

104

**Delete the duplicate records if exists and maintain unique record:** Provide the DELETE scripts using Analytical function

select count(\*) from kpi\_stg\_items

where rowid not in

(select max(rowid) from kpi\_stg\_items group by item\_id);

Delete from kpi\_stg\_items where rowid not in (

select max(rowid) from kpi\_stg\_items group by item\_id );

select count(\*) from kpi\_stg\_items

where rowid not in

(select max(rowid) from kpi\_stg\_items group by item\_id);

select count(\*) from kpi\_stg\_departments

where rowid not in

(select max(rowid) from kpi\_stg\_departments group by date\_last\_modified,department\_id,isinactive, name,ws\_description );

select count(\*) from kpi\_stg\_channel

where rowid not in

(select max(rowid) from kpi\_stg\_channel group by list\_id);

select count(\*) from kpi\_item\_merchandise\_subclass

where rowid not in

(select max(rowid) from kpi\_item\_merchandise\_subclass group by item\_merchandise\_subclass\_id);

select count(\*) from kpi\_stg\_locations

where rowid not in

(select max(rowid) from kpi\_stg\_locations group by location\_id);

select count(\*) from kpi\_stg\_transactions

where rowid not in

(select max(rowid) from kpi\_stg\_transactions group by transaction\_id);

select count(\*) from kpi\_stg\_transaction\_lines

where rowid not in

(select max(rowid) from kpi\_stg\_transaction\_lines group by transaction\_id);

select count(\*) from kpi\_stg\_classes

where rowid not in

(select max(rowid) from kpi\_stg\_classes group by class\_id);

select count(\*) from kpi\_item\_merchandise\_class

where rowid not in(select max(rowid) from kpi\_item\_merchandise\_class group by item\_merchandise\_class\_id);

Adding Primary keys:

alter table kpi\_stg\_transactions add constraint pk\_transaction\_id primary key(transaction\_id);

alter table kpi\_stg\_channel add constraint pk\_list\_id primary key(list\_id);

alter table kpi\_stg\_transaction\_lines add constraint pk\_transaction\_lines primary key(transaction\_id,transaction\_line\_id);

alter table kpi\_stg\_locations add constraint pk\_location\_id add primary key (location\_id);

alter table kpi\_stg\_departments add constraints pk\_department\_id primary key (department\_id);

alter table kpi\_stg\_classes add constraints pk\_class\_id primary key(class\_id);

alter table kpi\_stg\_items add constraints pk\_item\_id primary key(item\_id);

alter table kpi\_item\_merchandise\_depart add constraints pk\_item\_department\_id primary key(item\_merchandise\_department\_id);

alter table kpi\_item\_merchandise\_collect add constraints pk\_item\_collect\_id primary key(item\_merchandise\_collection\_id);

alter table kpi\_item\_merchandise\_class add constraints pk\_item\_class\_id primary key(item\_merchandise\_class\_id);

alter table kpi\_item\_merchandise\_subclass add constraints pk\_item\_subclass\_id

primary key(item\_merchandise\_subclass\_id);

**Parents key found error not found resolving:**

**Adding Foreign Keys:**

alter table kpi\_stg\_items

add constraints fk\_ws\_department\_id

foreign key(ws\_merchandise\_department\_id) references

kpi\_item\_merchandise\_depart(item\_merchandise\_department\_id);

select distinct ws\_merchandise\_collection\_id from kpi\_stg\_items

where ws\_merchandise\_collection\_id not in

(select item\_merchandise\_collection\_id from kpi\_item\_merchandise\_collect);

delete from kpi\_stg\_items

where ws\_merchandise\_collection\_id not in (select item\_merchandise\_collection\_id from kpi\_item\_merchandise\_collect);

alter table kpi\_stg\_items

add constraints fk\_ws\_collection\_id

foreign key(ws\_merchandise\_collection\_id) references

kpi\_item\_merchandise\_collect(item\_merchandise\_collection\_id);

select ws\_merchandise\_class\_id from kpi\_stg\_items

where ws\_merchandise\_class\_id not in

(select item\_merchandise\_class\_id from kpi\_item\_merchandise\_class);

delete from kpi\_stg\_items

where ws\_merchandise\_class\_id not in

(select item\_merchandise\_class\_id from kpi\_item\_merchandise\_class);

alter table kpi\_stg\_items

add constraints fk\_ws\_class\_id foreign key(ws\_merchandise\_class\_id) references

kpi\_item\_merchandise\_class(item\_merchandise\_class\_id);

alter table kpi\_stg\_transactions

add foreign key(channel\_id) references kpi\_stg\_channel(list\_id);

select ws\_merchandise\_subclass\_id from kpi\_stg\_items

where ws\_merchandise\_subclass\_id not in

(select item\_merchandise\_subclass\_id from kpi\_item\_merchandise\_subclass);

delete from kpi\_stg\_items

where ws\_merchandise\_subclass\_id not in

(select item\_merchandise\_subclass\_id from kpi\_item\_merchandise\_subclass);

alter table kpi\_stg\_items

add constraints fk\_ws\_subclass\_id

foreign key(ws\_merchandise\_subclass\_id) references

kpi\_item\_merchandise\_subclass(item\_merchandise\_subclass\_id);

alter table kpi\_stg\_transaction\_lines

add constraints fk\_location\_id

foreign key (location\_id) references

kpi\_stg\_locations(location\_id);

select distinct item\_id from kpi\_stg\_transaction\_lines

where item\_id not in (select item\_id from kpi\_stg\_items);

delete from kpi\_stg\_transaction\_lines

where item\_id not in (select item\_id from kpi\_stg\_items);

alter table kpi\_stg\_transaction\_lines

add constraints fk\_items\_id

foreign key (item\_id) references

kpi\_stg\_items(item\_id);

select count(\*) from kpi\_stg\_departments

where rowid not in

(select max(rowid) from kpi\_stg\_departments group by department\_id);

select department\_id from kpi\_stg\_transaction\_lines

where

department\_id not in (select department\_id from kpi\_stg\_departments);

delete from kpi\_transaction\_lines

where department\_id not in

(select department\_id from kpi\_stg\_departments);

alter table kpi\_stg\_transaction\_lines

add constraints fk\_department\_id

foreign key (department\_id) references

kpi\_stg\_departments(department\_id);

Create Target tables:

1. create table kpi\_channel\_dim (date\_created date ,is\_record\_inactive char,last\_modified\_date date,list\_id number(20,0),ist\_item\_name varchar(20),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

2. create table kpi\_location\_dim (location\_id number(20,0),address varchar(100),city varchar(50),country varchar(50),date\_last\_modified date,full\_name varchar(50),isinactive varchar(50),name varchar(50),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date, kpi\_dw\_update\_date date);

3. create table kpi\_transaction\_line\_fact (transaction\_id number(20,0), transaction\_line\_id number(20,0),tranid varchar(30),transaction\_type varchar(50),trandate date,kpi\_channel\_skey number(20,0),kpi\_location\_skey number(20,0), kpi\_department\_skey number(20,0),kpi\_item\_skey number(20,0),amount number(8,2),cost number(8,2),units number(5,0),kpi\_dw\_skey number(20,0));

4. create table kpi\_item\_merch\_depart\_dim(item\_merchandise\_department\_id number(20,0),description varchar(50),item\_merchandise\_department\_na varchar(10),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

5. create table kpi\_item\_merch\_coll\_dim(item\_merchandise\_collection\_id number(20,0),description varchar(50),item\_merchandise\_collection\_na varchar(50),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

6. create table kpi\_item\_merchandise\_class\_dim(item\_merchandise\_class\_id number(20,0),description varchar(50),item\_merchandise\_class\_name varchar(50),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

7. create table kpi\_department\_dim (date\_last\_modified date,department\_id number(20,0) ,Isinactive varchar(50),name varchar(10),ws\_description varchar(50),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

8.create table kpi\_item\_dim(item number(20,0),sku varchar(100),type\_name varchar(30), Salesdescription varchar(100),kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,Kpi\_dw\_update\_date date,kpi\_class\_skey number(20,0),ws\_merchandise\_department\_skey number(20,0),ws\_merchandise\_collection\_skey number(20,0),ws\_merchandise\_class\_skey number(20,0),ws\_merchandise\_subclass\_skey number(20,0));

9. create table kpi\_class\_dim (class\_id number(20,0),date\_last\_modified date,full\_name varchar(50),isinactive varchar(5),name varchar(50),kpi\_dw\_skey number(20,0),Kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

10. create table kpi\_item\_merch\_subclass\_dim(item\_merchandise\_subclass\_id number(20,0),description varchar(50),item\_merchandise\_subclass\_name varchar(10),Kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

**CREATE SEQUENCE to populate KPI\_DW\_SKEY field in all Target tables.**

**Provide all the scripts**

create sequence kpi\_dw\_skey;

Sequence created.

update kpi\_class\_dim set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

6 rows updated.

alter table kpi\_class\_dim modify kpi\_dw\_insert\_date default sysdate;

Table altered.

alter table kpi\_class\_dim modify kpi\_dw\_update\_date default sysdate;

Table altered.

conn Stagetable;

Enter password:

Connected.

SQL> conn Targettable;

Enter password:

Connected.

grant select on kpi\_item\_merchandise\_dept to Targettable;

Grant succeeded.

conn Targettable;

Enter password:

Connected.

insert into kpi\_item\_merchandise\_depart\_dim(item\_merchandise\_department\_id,description,item\_merchandise\_department\_na)(select \* from kpi\_stg\_item\_merchandise\_dept);

87 rows created.

create sequence kpi\_dw\_skey4;

Sequence created.

update kpi\_item\_merch\_depart\_dim set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

87 rows updated.

alter table kpi\_item\_merchandise\_dept\_dim modify kpi\_dw\_insert\_date default sysdate;

Table altered.

alter table kpi\_item\_merchandise\_dept\_dim modify kpi\_dw\_update\_date default sysdate;

Table altered.

SQL> conn stagetable;

Enter password:

Connected.

SQL> conn Targettable;

Enter password:

Connected.

SQL> grant select on kpi\_item\_merchandise\_dept to Targettable;

Grant succeeded.

conn Targettable;

Enter password:

Connected.

insert into kpi\_item\_merch\_coll\_dim(item\_merchandise\_collection\_id,description,item\_merchandise\_collection\_na)(select \* from kpi\_stg\_item\_merchandise\_dept);

87 rows created.

create sequence kpi\_dw\_skey5;

Sequence created.

update kpi\_item\_merch\_coll\_dim set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

87 rows updated.

alter table kpi\_item\_merch\_coll\_dim modify kpi\_dw\_insert\_date default sysdate;

Table altered.

alter table kpi\_item\_merch\_coll\_dim modify kpi\_dw\_update\_date default sysdate;

Table altered.

grant select on kpi\_item\_merchandise\_class to Targettable;

Grant succeeded.

conn Targettable;

Enter password:

Connected.

insert into kpi\_item\_merchandise\_class\_dim(item\_merchandise\_class\_id,description,item\_merchandise\_class\_name)(select \* from kpi\_stg\_item\_merchandise\_class);

83 rows created.

create sequence kpi\_dw\_skey6;

Sequence created.

update kpi\_item\_merchandise\_class\_dim set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

83 rows updated.

alter table kpi\_item\_merchandise\_class\_dim modify kpi\_dw\_insert\_date default sysdate;

Table altered.

alter table kpi\_item\_merchandise\_class\_dim modify kpi\_dw\_update\_date default sysdate;

Table altered.

conn Stagetable;

Enter password:

Connected.

conn Targettable;

Enter password:

Connected.

grant select on kpi\_stg\_item\_merchandise\_subcl to Targettable;

Grant succeeded.

conn Targettable;

Enter password:

Connected.

insert into kpi\_item\_merchandise\_subclass\_dim(item\_merchandise\_subclass\_id,description,item\_merchandise\_subclass\_name)(select \* from kpi\_item\_merchandise\_subclass);

insert into kpi\_item\_merchandise\_subclass\_dim(item\_merchandise\_subclass\_id,description,item\_merchandise\_subclass\_name)(select \* from kpi\_item\_merchandise\_subclass)

conn stagetable;

Enter password: Connected.

alter table kpi\_item\_merchandise\_subclass rename to kpi\_item\_merch\_subclass;

Table altered.

conn Targettable;

Enter password:

Connected.

conn practise;

Enter password:

Connected.

grant select on kpi\_item\_merch\_subclass to Targettable;

Grant succeeded.

conn Targettable;

Enter password:

Connected.

insert into kpi\_item\_merchandise\_subclass\_dim(item\_merchandise\_subclass\_id,description,item\_merchandise\_subclass\_name)(select \* from kpi\_item\_merch\_subclass);

insert into kpi\_item\_merchandise\_subclass\_dim(item\_merchandise\_subclass\_id,description,item\_merchandise\_subclass\_name)(select \* from kpi\_item\_merch\_subclass)

\*

ERROR at line 1:

ORA-00972: identifier is too long

create table kpi\_item\_merch\_subclass\_dim(item\_merchandise\_subclass\_id number(20,0),description varchar(50),item\_merchandise\_subclass\_name varchar(10),

2 Kpi\_dw\_skey number(20,0),kpi\_dw\_insert\_date date,kpi\_dw\_update\_date date);

Table created.

insert into kpi\_merch\_subclass\_dim(item\_merchandise\_subclass\_id,description ,item\_merchandise\_subclass\_name)(select \* from kpi\_item\_merchandise\_subclass);

85 rows created.

create sequence kpi\_dw\_skey7;

Sequence created.

update kpi\_merch\_subclass\_dim set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

85 rows updated.

alter table kpi\_merch\_subclass\_dim modify kpi\_dw\_insert\_date default sysdate;

Table altered.

alter table kpi\_merch\_subclass\_dim modify kpi\_dw\_update\_date default sysdate;

Table altered.

conn practise;

Enter password:

Connected.

conn Targettable;

Enter password:

Connected.

grant select on kpi\_stg\_transaction\_lines to Targettable;

Grant succeeded.

conn Targettable;

Enter password:

Connected.

insert into kpi\_transaction\_line\_fact(transaction\_id, transaction\_line\_id, tranid, transaction\_type, trandate, amount, cost, units)

(select tl.transaction\_id, tl.transaction\_line\_id, t.tranid, t.transaction\_type, t.trandate, tl.amount, tl.cost, tl.units

from practise.kpi\_stg\_transaction\_lines tl join practise.kpi\_stg\_transactions t on t.transaction\_id=tl.transaction\_id);

2758 rows created.

create sequence kpi\_dw\_skey8;

Sequence created.

update kpi\_transaction\_line\_fact set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

2758 rows updated.

conn practise;

Enter password:

Connected.

conn Targettable;

Enter password:

Connected.

grant select on kpi\_stg\_items to Targettable;

Grant succeeded.

insert into kpi\_item\_dim(item\_id,sku,type\_name,salesdescription,kpi\_class\_skey,ws\_department\_skey,ws\_collection\_skey,ws\_class\_skey,ws\_subclass\_skey)(select \* from kpi\_stg\_items);

88 rows created.

update kpi\_item\_dim set kpi\_dw\_skey=kpi\_dw\_skey.nextval;

88 rows updated.

alter table kpi\_item\_dim modify kpi\_dw\_insert\_date default sysdate;

Table altered.

alter table kpi\_item\_dim modify kpi\_dw\_update\_date default sysdate;

Table altered.

**Adding Primary Keys:**

alter table kpi\_channel\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_transaction\_line\_fact add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_department\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_item\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_class\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_item\_merch\_depart\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_item\_merch\_coll\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_item\_merchandise\_class\_dim add primary key(kpi\_dw\_skey);

Table altered.

alter table kpi\_merch\_subclass\_dim add primary key(kpi\_dw\_skey);

Table altered.d

**CREATE BRAND\_NAME field in KPI\_ITEM\_DIM and populate values from NAME field present in KPI\_CLASS\_DIM**

1. Provide the script to add the new column

alter table kpi\_item\_dim add brand\_name varchar(5);

Table altered.

SQL> desc kpi\_item\_dim;

Name Null? Type

----------------------------------------- -------- ----------------------------

ITEM\_ID NUMBER(20)

SKU VARCHAR2(100)

TYPE\_NAME VARCHAR2(30)

SALESDESCRIPTION VARCHAR2(100)

KPI\_DW\_SKEY NOT NULL NUMBER(20)

KPI\_DW\_INSERT\_DATE DATE

KPI\_DW\_UPDATE\_DATE DATE

KPI\_CLASS\_SKEY NUMBER(20)

WS\_DEPARTMENT\_SKEY NUMBER(20)

WS\_COLLECTION\_SKEY NUMBER(20)

WS\_CLASS\_SKEY NUMBER(20)

WS\_SUBCLASS\_SKEY NUMBER(20)

BRAND\_NAME VARCHAR2(5)

2. Provide the UPDATE script to populate BRAND\_NAME field

update kpi\_item\_dim i set i.brand\_name=(select c.name from kpi\_class\_dim c where c.class\_id=i.kpi\_class\_skey);

11.CREATE KPI\_ITEM\_DIM\_FLAT table STRUCTURE ONLY with following fields using SELECT statement joining the required Target tables

create table item\_dim\_flat(sku varchar(100), item\_type varchar(50), brand varchar(50), merchandise\_department varchar(50),merchandise\_dept\_name varchar(50), merchandise\_collection varchar(50), merchandise\_collection\_name varchar(50), merchandise\_class varchar(50),merchandise\_class\_name varchar(5), merchandise\_subclass varchar(50), merchandise\_subclass\_name varchar(50), kpi\_item\_skey number);

declare

cursor c1 is select i.sku, i.type\_name, i.brand\_name, i.kpi\_dw\_skey, d.description, d.item\_merchandise\_department\_na,cl.description, cl.item\_merchandise\_collection\_na, c.description, c.item\_merchandise\_class\_name, s.description, s.item\_merchandise\_subclass\_name from kpi\_item\_dim i join kpi\_item\_merchandise\_depar\_dim

d on i.kpi\_dw\_skey=d.kpi\_dw\_skey join kpi\_item\_merchandise\_col\_dim cl on d.kpi\_dw\_skey=cl.kpi\_dw\_skey join kpi\_item\_merchandise\_class\_dimc on cl.kpi\_dw\_skey=c.kpi\_dw\_skey join kpi\_item\_merchandise\_subcl\_dim s on c.kpi\_dw\_skey=s.kpi\_dw\_skey;

begin

for cur in c1 loop

insert into item\_dim\_flat values(c1.sku, c1.item\_type, c1.brand,c1.merchandise\_department,c1.merchandise\_dept\_name,c1.merchandise\_collection,

c1.merchandise\_collection\_name,c1.merchandise\_class,c1.merchandise\_class\_name,c1.merchandise\_subclass,c1.merchandise\_subclass\_name,c1.kpi\_item\_skey number)

(select i.sku,i.type\_name, i.brand\_name,i.kpi\_dw\_skey,d.description,d.item\_merchandise\_department\_na,cl.description,cl.item\_merchandise\_collection\_na,

c.description,c.item\_merchandise\_class\_name,s.description,s.item\_merchandise\_subclass\_name from kpi\_item\_dim i,kpi\_item\_merchandise\_depar\_dim

d,kpi\_item\_merchandise\_col\_dim cl,kpi\_item\_merchandise\_class\_dim c,kpi\_item\_merchandise\_subcl\_dim s);

end loop;

close c1;

end;

12.If TRANSACTION\_TYPE is " Sales Order " then its Demand, if TRANSACTION\_TYPE is " Invoice" then its Sales Answer the requested questions.

1) select transaction\_type, amount

from (select transaction\_type, amount, row\_number() over (partition by transaction\_type order by amount desc) top\_val, row\_number() over (partition by transaction\_type order by amount) bottom\_val) where top\_val<=5 or bottom\_val<=5;

2) select d.name, max(t.amount) from department\_dim d join transaction\_line\_fact t on d.kpi\_dw\_skey=t.kpi\_dw\_skey group by t.transaction\_type, d.name having transaction\_type='Sales Order' or transaction\_type='Invoices';

4) select l.city from location\_dim l join transaction\_line\_fact f on f.kpi\_dw\_skey=l.kpi\_dw\_skey where transaction\_type='Sales Order' order by transaction\_type;

5) select transaction\_type, amount, units from transaction\_line\_fact group by transaction\_type, amount, units order by 1;

6) create force view target\_view as select t.transaction\_id, t.transaction\_line\_id, t.trandate, t.transaction\_type,i.type\_name, l.city, d.name, cd.list\_item\_name, id.item\_merch\_department\_na, id.description,ic.item\_merch\_collection\_na,ic.description,c.item\_merch\_class\_name,c.description, s.item\_merch\_subclass\_name,s.description,t.amount,t.units

from transaction\_line\_fact t join item\_dim i on t.kpi\_dw\_skey = i.kpi\_dw\_skey

join location\_dim l on i.kpi\_dw\_skey = l.kpi\_dw\_skey

join department\_dim d on l.kpi\_dw\_skey = d.kpi\_dw\_skey

join channel\_dim cd on d.kpi\_dw\_skey = cd.kpi\_dw\_skey

join item\_merch\_department\_dim id on cd.kpi\_dw\_skey = id.kpi\_dw\_skey

join item\_merch\_collection\_dim ic on id.kpi\_dw\_skey = ic.kpi\_dw\_skey

join item\_merch\_class\_dim c on ic.kpi\_dw\_skey = c.kpi\_dw\_skey

join item\_merch\_subclass\_dim s on c.kpi\_dw\_skey = s.kpi\_dw\_skey;