

Create database Sales\_DW;

Use Sales\_DW;

Create table DimCustomer

(

CustomerID int primary key AUTO\_INCREMENT,

CustomerAltID varchar(10) not null,

CustomerName varchar(50),

Gender varchar(20)

);

Insert into DimCustomer(CustomerAltID,CustomerName,Gender)values

('IMI-001','Henry Ford','M'),

('IMI-002','Bill Gates','M'),

('IMI-003','Muskan Shaikh','F'),

('IMI-004','Richard Thrubin','M'),

('IMI-005','Emma Wattson','F');

Create table DimProduct

(

ProductKey int primary key AUTO\_INCREMENT,

ProductAltKey varchar(10)not null,

ProductName varchar(100),

ProductActualCost int,

ProductSalesCost int

);

Insert into DimProduct(ProductAltKey,ProductName, ProductActualCost, ProductSalesCost)values

('ITM-001','Wheat Floor 1kg',5.50,6.50),

('ITM-002','Rice Grains 1kg',22.50,24),

('ITM-003','SunFlower Oil 1 ltr',42,43.5),

('ITM-004','Nirma Soap',18,20),

('ITM-005','Arial Washing Powder 1kg',135,139);

Create table DimStores

(

StoreID int primary key AUTO\_INCREMENT,

StoreAltID varchar(10)not null,

StoreName varchar(100),

StoreLocation varchar(100),

City varchar(100),

State varchar(100),

Country varchar(100)

);

Insert into DimStores(StoreAltID,StoreName,StoreLocation,City,State,Country )values

('LOC-A1','X-Mart','S.P. RingRoad','Ahmedabad','Guj','India'),

('LOC-A2','X-Mart','Maninagar','Ahmedabad','Guj','India'),

('LOC-A3','X-Mart','Sivranjani','Ahmedabad','Guj','India');

Create table DimSalesPerson

(

SalesPersonID int primary key AUTO\_INCREMENT,

SalesPersonAltID varchar(10)not null,

SalesPersonName varchar(100),

StoreID int,

City varchar(100),

State varchar(100),

Country varchar(100)

);

Insert into DimSalesPerson(SalesPersonAltID,SalesPersonName,StoreID,City,State,Country )values

('SP-DMSPR1','Ashish',1,'Ahmedabad','Guj','India'),

('SP-DMSPR2','Ketan',1,'Ahmedabad','Guj','India'),

('SP-DMNGR1','Srinivas',2,'Ahmedabad','Guj','India'),

('SP-DMNGR2','Saad',2,'Ahmedabad','Guj','India'),

('SP-DMSVR1','Jasmin',3,'Ahmedabad','Guj','India'),

('SP-DMSVR2','Jacob',3,'Ahmedabad','Guj','India');

Create Table FactProductSales

(

TransactionId bigint primary key AUTO\_INCREMENT,

SalesInvoiceNumber int not null,

SalesDateKey int,

SalesTimeKey int,

SalesTimeAltKey int,

StoreID int not null,

CustomerID int not null,

ProductID int not null,

SalesPersonID int not null,

Quantity float,

SalesTotalCost int,

ProductActualCost int,

Deviation float

);

-- Add relation between fact table foreign keys to Primary keys of Dimensions

AlTER TABLE FactProductSales ADD CONSTRAINT

FK\_StoreID FOREIGN KEY (StoreID)REFERENCES DimStores(StoreID);

AlTER TABLE FactProductSales ADD CONSTRAINT

FK\_CustomerID FOREIGN KEY (CustomerID)REFERENCES Dimcustomer(CustomerID);

AlTER TABLE FactProductSales ADD CONSTRAINT

FK\_ProductKey FOREIGN KEY (ProductID)REFERENCES Dimproduct(ProductKey);

AlTER TABLE FactProductSales ADD CONSTRAINT

FK\_SalesPersonID FOREIGN KEY (SalesPersonID)REFERENCES Dimsalesperson(SalesPersonID);

Insert into FactProductSales(SalesInvoiceNumber,SalesDateKey,

SalesTimeKey,SalesTimeAltKey,StoreID,CustomerID,ProductID ,

SalesPersonID,Quantity,ProductActualCost,SalesTotalCost,Deviation)values

/\*1-jan-2013

--SalesInvoiceNumber,SalesDateKey,SalesTimeKey,SalesTimeAltKey,\_

StoreID,CustomerID,ProductID ,SalesPersonID,Quantity,\_

ProductActualCost,SalesTotalCost,Deviation)\*/

(1,20130101,44347,121907,1,1,1,1,2,11,13,2),

(1,20130101,44347,121907,1,1,2,1,1,22.50,24,1.5),

(1,20130101,44347,121907,1,1,3,1,1,42,43.5,1.5),

(2,20130101,44519,122159,1,2,3,1,1,42,43.5,1.5),

(2,20130101,44519,122159,1,2,4,1,3,54,60,6),

(3,20130101,52415,143335,1,3,2,2,2,11,13,2),

(3,20130101,52415,143335,1,3,3,2,1,42,43.5,1.5),

(3,20130101,52415,143335,1,3,4,2,3,54,60,6),

(3,20130101,52415,143335,1,3,5,2,1,135,139,4),

/\*2-jan-2013

--SalesInvoiceNumber,SalesDateKey,SalesTimeKey,SalesTimeAltKey,\_

StoreID,CustomerID,ProductID ,SalesPersonID,Quantity,ProductActualCost,SalesTotalCost,Deviation)\*/

(4,20130102,44347,121907,1,1,1,1,2,11,13,2),

(4,20130102,44347,121907,1,1,2,1,1,22.50,24,1.5),

(5,20130102,44519,122159,1,2,3,1,1,42,43.5,1.5),

(5,20130102,44519,122159,1,2,4,1,3,54,60,6),

(6,20130102,52415,143335,1,3,2,2,2,11,13,2),

(6,20130102,52415,143335,1,3,5,2,1,135,139,4),

(7,20130102,44347,121907,2,1,4,3,3,54,60,6),

(7,20130102,44347,121907,2,1,5,3,1,135,139,4),

/\*3-jan-2013

--SalesInvoiceNumber,SalesDateKey,SalesTimeKey,SalesTimeAltKey,StoreID,\_

CustomerID,ProductID ,SalesPersonID,Quantity,ProductActualCost,SalesTotalCost,Deviation)\*/

(8,20130103,59326,162846,1,1,3,1,2,84,87,3),

(8,20130103,59326,162846,1,1,4,1,3,54,60,3),

(9,20130103,59349,162909,1,2,1,1,1,5.5,6.5,1),

(9,20130103,59349,162909,1,2,2,1,1,22.50,24,1.5),

(10,20130103,67390,184310,1,3,1,2,2,11,13,2),

(10,20130103,67390,184310,1,3,4,2,3,54,60,6),

(11,20130103,74877,204757,2,1,2,3,1,5.5,6.5,1),

(11,20130103,74877,204757,2,1,3,3,1,42,43.5,1.5)

mysql> select \* from DimCustomer;

+------------+---------------+-----------------+--------+

| CustomerID | CustomerAltID | CustomerName | Gender |

+------------+---------------+-----------------+--------+

| 1 | IMI-001 | Henry Ford | M |

| 2 | IMI-002 | Bill Gates | M |

| 3 | IMI-003 | Muskan Shaikh | F |

| 4 | IMI-004 | Richard Thrubin | M |

| 5 | IMI-005 | Emma Wattson | F |

+------------+---------------+-----------------+--------+

5 rows in set (0.01 sec)

mysql> Select \* from DimProduct;

+------------+---------------+--------------------------+-------------------+------------------+

| ProductKey | ProductAltKey | ProductName | ProductActualCost | ProductSalesCost |

+------------+---------------+--------------------------+-------------------+------------------+

| 1 | ITM-001 | Wheat Floor 1kg | 6 | 7 |

| 2 | ITM-002 | Rice Grains 1kg | 23 | 24 |

| 3 | ITM-003 | SunFlower Oil 1 ltr | 42 | 44 |

| 4 | ITM-004 | Nirma Soap | 18 | 20 |

| 5 | ITM-005 | Arial Washing Powder 1kg | 135 | 139 |

+------------+---------------+--------------------------+-------------------+------------------+

5 rows in set (0.01 sec)

mysql> Select \* from DimStores;

+---------+------------+-----------+---------------+-----------+-------+---------+

| StoreID | StoreAltID | StoreName | StoreLocation | City | State | Country |

+---------+------------+-----------+---------------+-----------+-------+---------+

| 1 | LOC-A1 | X-Mart | S.P. RingRoad | Ahmedabad | Guj | India |

| 2 | LOC-A2 | X-Mart | Maninagar | Ahmedabad | Guj | India |

| 3 | LOC-A3 | X-Mart | Sivranjani | Ahmedabad | Guj | India |

+---------+------------+-----------+---------------+-----------+-------+---------+

3 rows in set (0.00 sec)

mysql> Select \* from DimSalesPerson;

+---------------+------------------+-----------------+---------+-----------+-------+---------+

| SalesPersonID | SalesPersonAltID | SalesPersonName | StoreID | City | State | Country |

+---------------+------------------+-----------------+---------+-----------+-------+---------+

| 1 | SP-DMSPR1 | Ashish | 1 | Ahmedabad | Guj | India |

| 2 | SP-DMSPR2 | Ketan | 1 | Ahmedabad | Guj | India |

| 3 | SP-DMNGR1 | Srinivas | 2 | Ahmedabad | Guj | India |

| 4 | SP-DMNGR2 | Saad | 2 | Ahmedabad | Guj | India |

| 5 | SP-DMSVR1 | Jasmin | 3 | Ahmedabad | Guj | India |

| 6 | SP-DMSVR2 | Jacob | 3 | Ahmedabad | Guj | India |

+---------------+------------------+-----------------+---------+-----------+-------+---------+

6 rows in set (0.01 sec)

mysql> Select \* from FactProductSales;

+---------------+--------------------+--------------+--------------+-----------------+---------+------------+-----------+---------------+----------+----------------+-------------------+-----------+

| TransactionId | SalesInvoiceNumber | SalesDateKey | SalesTimeKey | SalesTimeAltKey | StoreID | CustomerID | ProductID | SalesPersonID | Quantity | SalesTotalCost | ProductActualCost | Deviation |

+---------------+--------------------+--------------+--------------+-----------------+---------+------------+-----------+---------------+----------+----------------+-------------------+-----------+

| 1 | 1 | 20130101 | 44347 | 121907 | 1 | 1 | 1 | 1 | 2 | 13 | 11 | 2 |

| 2 | 1 | 20130101 | 44347 | 121907 | 1 | 1 | 2 | 1 | 1 | 24 | 23 | 1.5 |

| 3 | 1 | 20130101 | 44347 | 121907 | 1 | 1 | 3 | 1 | 1 | 44 | 42 | 1.5 |

| 4 | 2 | 20130101 | 44519 | 122159 | 1 | 2 | 3 | 1 | 1 | 44 | 42 | 1.5 |

| 5 | 2 | 20130101 | 44519 | 122159 | 1 | 2 | 4 | 1 | 3 | 60 | 54 | 6 |

| 6 | 3 | 20130101 | 52415 | 143335 | 1 | 3 | 2 | 2 | 2 | 13 | 11 | 2 |

| 7 | 3 | 20130101 | 52415 | 143335 | 1 | 3 | 3 | 2 | 1 | 44 | 42 | 1.5 |

| 8 | 3 | 20130101 | 52415 | 143335 | 1 | 3 | 4 | 2 | 3 | 60 | 54 | 6 |

| 9 | 3 | 20130101 | 52415 | 143335 | 1 | 3 | 5 | 2 | 1 | 139 | 135 | 4 |

| 10 | 4 | 20130102 | 44347 | 121907 | 1 | 1 | 1 | 1 | 2 | 13 | 11 | 2 |

| 11 | 4 | 20130102 | 44347 | 121907 | 1 | 1 | 2 | 1 | 1 | 24 | 23 | 1.5 |

| 12 | 5 | 20130102 | 44519 | 122159 | 1 | 2 | 3 | 1 | 1 | 44 | 42 | 1.5 |

| 13 | 5 | 20130102 | 44519 | 122159 | 1 | 2 | 4 | 1 | 3 | 60 | 54 | 6 |

| 14 | 6 | 20130102 | 52415 | 143335 | 1 | 3 | 2 | 2 | 2 | 13 | 11 | 2 |

| 15 | 6 | 20130102 | 52415 | 143335 | 1 | 3 | 5 | 2 | 1 | 139 | 135 | 4 |

| 16 | 7 | 20130102 | 44347 | 121907 | 2 | 1 | 4 | 3 | 3 | 60 | 54 | 6 |

| 17 | 7 | 20130102 | 44347 | 121907 | 2 | 1 | 5 | 3 | 1 | 139 | 135 | 4 |

| 18 | 8 | 20130103 | 59326 | 162846 | 1 | 1 | 3 | 1 | 2 | 87 | 84 | 3 |

| 19 | 8 | 20130103 | 59326 | 162846 | 1 | 1 | 4 | 1 | 3 | 60 | 54 | 3 |

| 20 | 9 | 20130103 | 59349 | 162909 | 1 | 2 | 1 | 1 | 1 | 7 | 6 | 1 |

| 21 | 9 | 20130103 | 59349 | 162909 | 1 | 2 | 2 | 1 | 1 | 24 | 23 | 1.5 |

| 22 | 10 | 20130103 | 67390 | 184310 | 1 | 3 | 1 | 2 | 2 | 13 | 11 | 2 |

| 23 | 10 | 20130103 | 67390 | 184310 | 1 | 3 | 4 | 2 | 3 | 60 | 54 | 6 |

| 24 | 11 | 20130103 | 74877 | 204757 | 2 | 1 | 2 | 3 | 1 | 7 | 6 | 1 |

| 25 | 11 | 20130103 | 74877 | 204757 | 2 | 1 | 3 | 3 | 1 | 44 | 42 | 1.5 |

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