# **CODE AND OUTPUTS :** IMPLEMENTATION OF STAR SCHEMA

* DIMENSION TABLES

**SPECTATOR Table**

CREATE TABLE spectators (

spec\_id INT PRIMARY KEY,

spec\_name VARCHAR(30),

category VARCHAR(15));

INSERT INTO spectator VALUES

(101, 'EksheEk', 'senior'),

(102, 'EksheDon', 'student'),

(103, 'EksheTeen', 'adult'),

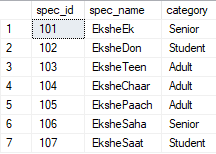
(104, 'EksheChaar', 'adult'),

(105, 'EkshePaach', 'adult'),

(106, 'EksheSaha', 'senior'),

(107, 'EksheSaat', 'student');

SELECT \* FROM spectator;



**LOCATION Table**

CREATE TABLE location(

loc\_id INT PRIMARY KEY,

stadium VARCHAR(50),

city VARCHAR(15),

states VARCHAR(15));

INSERT INTO location VALUES

(1,'Narendra Modi Stadium','Ahmedabad','Gujarat'),

(2,'Eden Gardens','Kolkata','West Bengal'),

(3,'DY Patil Stadium','Navi Mumbai','Maharashtra'),

(4,'Arun Jaitley Stadium','Delhi','Delhi NCR'),

(5,'KIIT Stadium','Bhubaneswar','Odisha');

SELECT \* FROM location;



**MATCH Table**

CREATE TABLE games(

game\_id INT PRIMARY KEY,

game\_name VARCHAR(15),

game\_type VARCHAR(15)

);

INSERT INTO games VALUES

(1,'cricket','outdoor'),

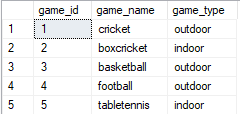
(2,'boxcricket','indoor'),

(3,'basketball','outdoor'),

(4,'football','outdoor'),

(5,'tabletennis','indoor');

SELECT \* FROM games;



**g\_dates Table**

CREATE TABLE g\_dates (

g\_date\_id INT PRIMARY KEY,

day VARCHAR(15),

month VARCHAR(15),

year VARCHAR(4));

INSERT INTO g\_dates VALUES

(1,'2','feb','2004'),

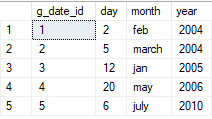
(2,'5','march','2004'),

(3,'12','jan','2005'),

(4,'20','may','2006'),

(5,'6','july','2010');

SELECT \* from g\_dates;



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* **FACT TABLE**

**game\_stats TABLE**

CREATE TABLE game\_stats (

spec\_id INT REFERENCES spectator(spec\_id),

loc\_id INT REFERENCES location(loc\_id),

game\_id INT REFERENCES games(game\_id),

g\_date\_id INT REFERENCES g\_dates(g\_date\_Id),

charge int

);

INSERT INTO game\_stats VALUES

(101,2,3,4,500),

(102,2,3,4,600),

(102,3,1,3,700),

(103,1,2,1,300),

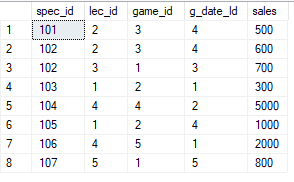
(104,4,4,2,5000),

(105,1,2,4,1000),

(106,4,5,1,2000),

(107,5,1,5,800);

SELECT \* from game\_stats;



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QUERY ON STAR SCHEMA:

select sum(gs.charge),spec.category,l.stadium,d.year

from game\_stats gs,spectator spec,location l,g\_dates d

where gs.spec\_id=spec.spec\_id and

gs.g\_date\_id= d.g\_date\_id and

gs.g\_date\_id = d.g\_date\_id

group by spec.category,l.stadium,d.year

having spec.category='adult' and

d.year='2004' and

l.stadium='KIIT Stadium';



IMPLEMENTATION OF ETL:

**EXTRACTION**

SALEST TABLE :

create table salest(

s\_person varchar(15),

item\_sold int,

price int,

s\_dt date,

item\_category varchar(15),

num\_item\_sold int

);

INSERTING VALUES INTO SALEST :

insert into salest values('Mayuri','2','12000','1-feb-2012','hardware','5');

insert into salest values('Chandrika','1','1500','3-feb-2012','software','3');

insert into salest values('Shruti','2','15000','3-feb-2012','hardware','4');

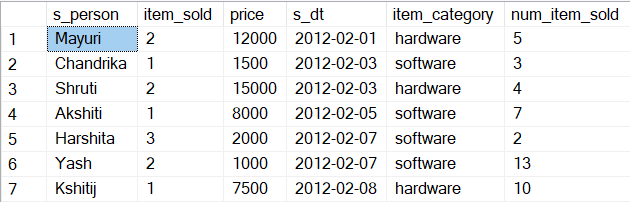
insert into salest values('Akshiti','1','8000','5-feb-2012','software','7');

insert into salest values('Harshita','3','2000','7-feb-2012','software','2');

insert into salest values('Yash','2','1000','7-feb-2012','software','13');

insert into salest values('Kshitij','1','7500','8-feb-2012','hardware','10');

select \* from salest;



SALES\_DETAILS TABLE :

create table sales\_details(

sales\_person varchar(30),

item\_name varchar(30),

item\_price int,

sales\_date date,

branch varchar(30),

no\_of\_item\_sold int

);

INSERTING VALUES INTO SALES\_DETAILS :

insert into sales\_details values('Mayuri','HardDisk',12000,'1-feb-2012','Thane',2);

insert into sales\_details values('Shruti','CPU',15000,'3-feb-2012','Andheri',2);

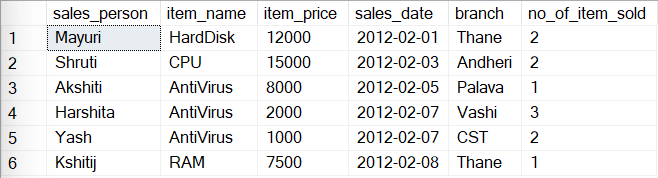
insert into sales\_details values('Akshiti','AntiVirus',8000,'5-feb-2012','Palava',1);

insert into sales\_details values('Harshita','AntiVirus',2000,'7-feb-2012','Vashi',3);

insert into sales\_details values('Yash','AntiVirus',1000,'7-feb-2012','CST',2);

insert into sales\_details values('Kshitij','RAM',7500,'8-feb-2012','Thane',1);

select \* from sales\_details;



SALES\_RECORDS TABLE :

create table sales\_records(

supplier varchar(15),

item\_name varchar(15),

price int,

sales\_dt date,

branch varchar(15),

item\_category varchar(15),

num\_item\_sold int

);

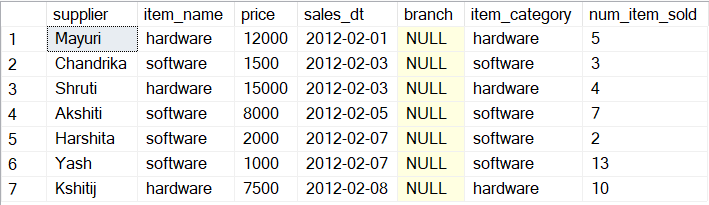
INSERTING VALUES INTO SALES\_RECORDS :

insert into sales\_records(supplier,item\_name,price,sales\_dt,branch,item\_category,num\_item\_sold)

select s\_person,item\_category,price,s\_dt,null,item\_category,num\_item\_sold

from salest;

select \* from sales\_records;

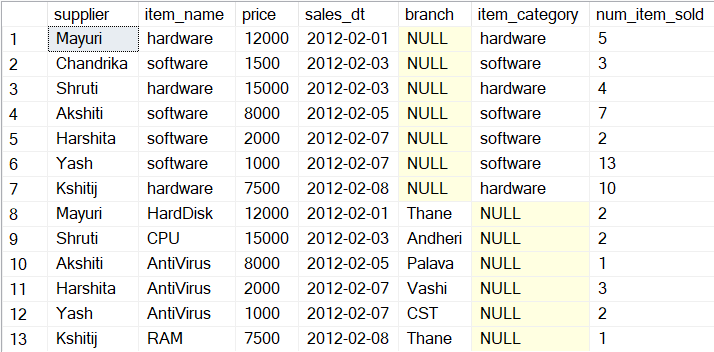


insert into sales\_records(supplier,item\_name,price,sales\_dt,branch,item\_category,num\_item\_sold)

select sales\_person,item\_name,item\_price,sales\_date,branch,null,no\_of\_item\_sold

from sales\_details;

select \* from sales\_records;



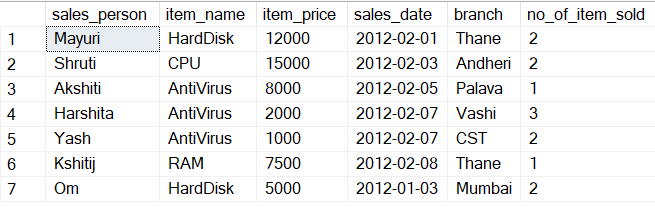
**TRANSFORMATION :**

INSERTING VALUES INTO SALES\_DETAILS :

insert into sales\_details

values('Om','HardDisk',5000,to\_date('2012-jan-03','yyyy-mm-dd'),'Mumbai',2);

select \* from sales\_details;



UPDATING VALUES OF SALES\_RECORDS :

update sales\_records set branch='unknown' where branch is null;

select \* from sales\_records;

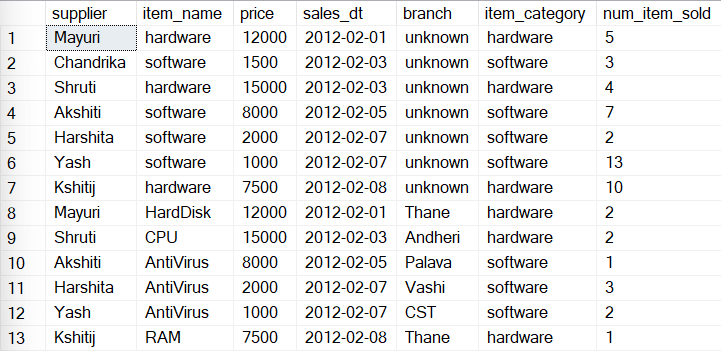


update sales\_records set item\_category='software' where item\_name='AntiVirus';

update sales\_records set item\_category='hardware'

where item\_name in('CPU','RAM','HardDisk');

select \* from sales\_records;



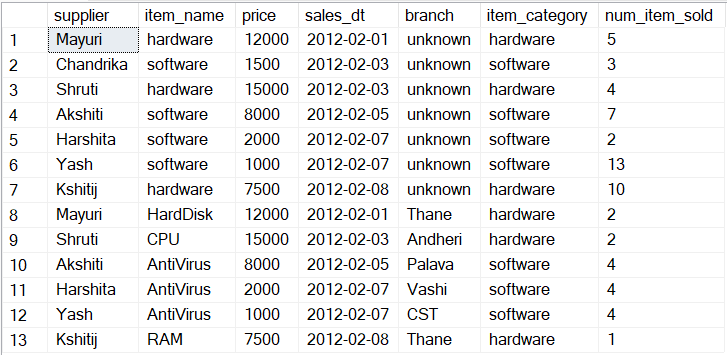
update sales\_records

set num\_item\_sold=(select avg(num\_item\_sold) from sales\_records)

where item\_name='AntiVirus'

;

select \* from sales\_records;



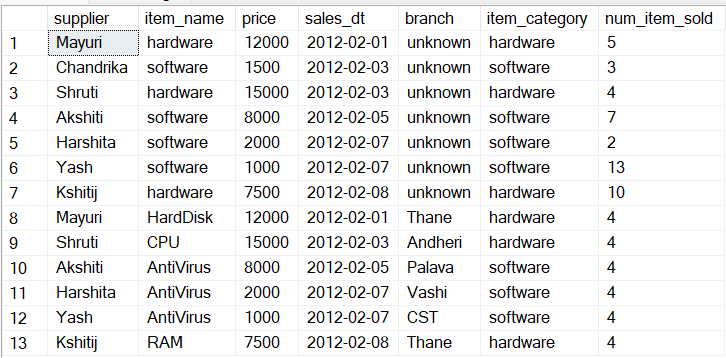
update sales\_records

set num\_item\_sold=(select avg(num\_item\_sold)from sales\_records)

where item\_name in('CPU','RAM','HardDisk')

;

select \* from sales\_records;



**LOADING**

CREATING VIEW CATALOG1 :

create view catalog1

as

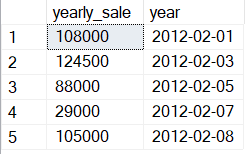
select sum(price\*num\_item\_sold) as yearly\_sale,

sales\_dt as year

from sales\_records

group by sales\_dt;

select \* from catalog1;



CREATING VIEW CATALOG2 :

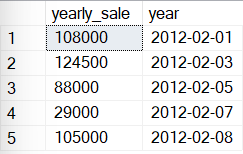
create view catalog2

as

select sum(price\*num\_item\_sold) as yearly\_sale,

sales\_dt as year from sales\_records group by sales\_dt;

select \* from catalog2;



CREATING VIEW CATEGORY:

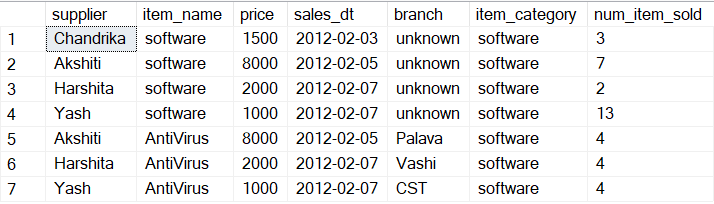
create view category

as

select \* from sales\_records

where item\_category='software';

select \* from category;



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