Output Document

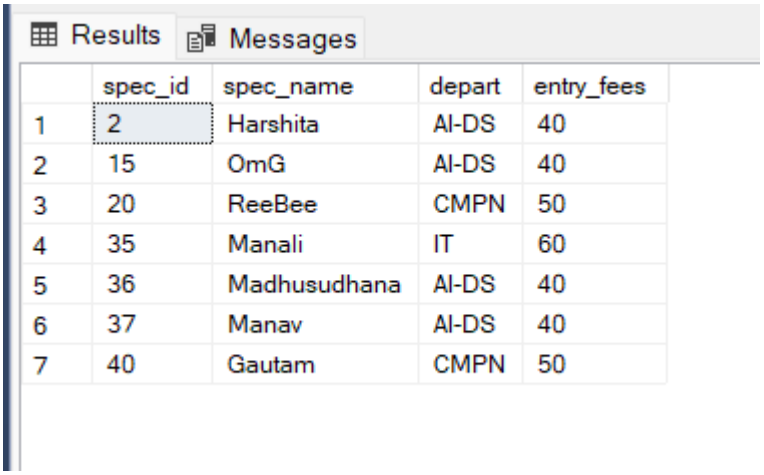
Queries :-

A] Implementation of Star Schema

Spectator Table

create table spectator(spec_id int primary key, spec_name varchar(20), depart varchar(20) constraint c check(category in('AI-DS','CMPN','IT')),entry_fees int);

insert into spectator values(15, 'OmG','AI-DS',40);
insert into spectator values(2, 'Harshita','AI-DS',40);
insert into spectator values(35, 'Manali','IT',60);
insert into spectator values(40, 'Gautam','CMPN',50);
insert into spectator values(37, 'Manav','AI-DS',40);
insert into spectator values(36, 'Madhusudhana','AI-DS',40);
insert into spectator values(20, 'ReeBee','CMPN',50);



Results Messages

	spec_id	spec_name	depart	entry_fees
1	2	Harshita	AI-DS	40
2	15	OmG	AI-DS	40
3	20	ReeBee	CMPN	50
4	35	Manali	IT	60
5	36	Madhusudhana	AI-DS	40
6	37	Manav	AI-DS	40
7	40	Gautam	CMPN	50

Location Table

create table location(location_id int primary key, classroom varchar(20), floor varchar(20), building varchar(20));

insert into location values(1,'B21','2','Engineering');
insert into location values(2,'C54','5','Engineering');
insert into location values(3,'E21','2','Pharmacy');
insert into location values(4,'401','4','Management');

Results Messages

	location_id	classroom	floor	building
1	1	B21	2	Engineering
2	2	C54	5	Engineering
3	3	E21	2	Pharmacy
4	4	401	4	Management

Game Table

create table game(game_id int primary key, game_name varchar(20), game_type varchar(20));

insert into game values(1045, 'CS:GO', 'FPS');
insert into game values(999, 'Valorant', 'FPS');
insert into game values(400, 'Minecraft', 'Open-World');
insert into game values(300, 'Fall Guys', 'Battle Royale');

Results Messages

	game_id	game_name	game_type
1	300	Fall Guys	Battle Royale
2	400	Minecraft	Open-World
3	999	Valorant	FPS
4	1045	CS:GO	FPS

Game Date

create table game_date(date_id int primary key, game_day varchar(10), game_month varchar(10),game_year varchar(10));

insert into game_date values(1, '12', 'August', '2022');
insert into game_date values(2, '26', 'July', '2022');
insert into game_date values(3, '30', 'September', '2022');
insert into game_date values(4, '18', 'December', '2022');
insert into game_date values(5, '6', 'January', '2023');

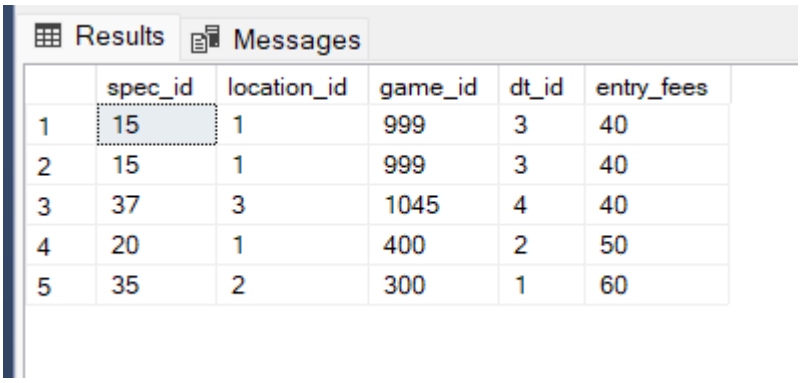
Results Messages

	date_id	game_day	game_month	game_year
1	1	12	August	2022
2	2	26	July	2022
3	3	30	September	2022
4	4	18	December	2022
5	5	6	January	2023

Game Stats

create table game_stats(spec_id int references spectator(spec_id), location_id references location(location_id),game_id int references game(game_id), dt_id int references game_date(game_id), entry_fees int);

insert into game_stats values(15, 1, 999, 3, 40);
insert into game_stats values(37, 3, 1045, 4, 40);
insert into game_stats values(20, 1, 400, 2, 50);
insert into game_stats values(35, 2, 300, 1, 60);



Results Messages

	spec_id	location_id	game_id	dt_id	entry_fees
1	15	1	999	3	40
2	15	1	999	3	40
3	37	3	1045	4	40
4	20	1	400	2	50
5	35	2	300	1	60

Query on Star Schema

```
select sum(gs.entry_fees),spec.depart,l.classroom,d.game_year
from game_stats gs,spectator spec,location l,game_date d
where gs.spec_id=spec.spec_id and
gs.dt_id=d.date_id and
gs.dt_id=d.date_id
group by spec.depart,l.classroom,d.game_year
having spec.depart='AI-DS'
and d.game_year='2022'
and l.classroom='B21';
```

Results Messages

	(No column name)	depart	classroom	game_year
1	120	AI-DS	B21	2022

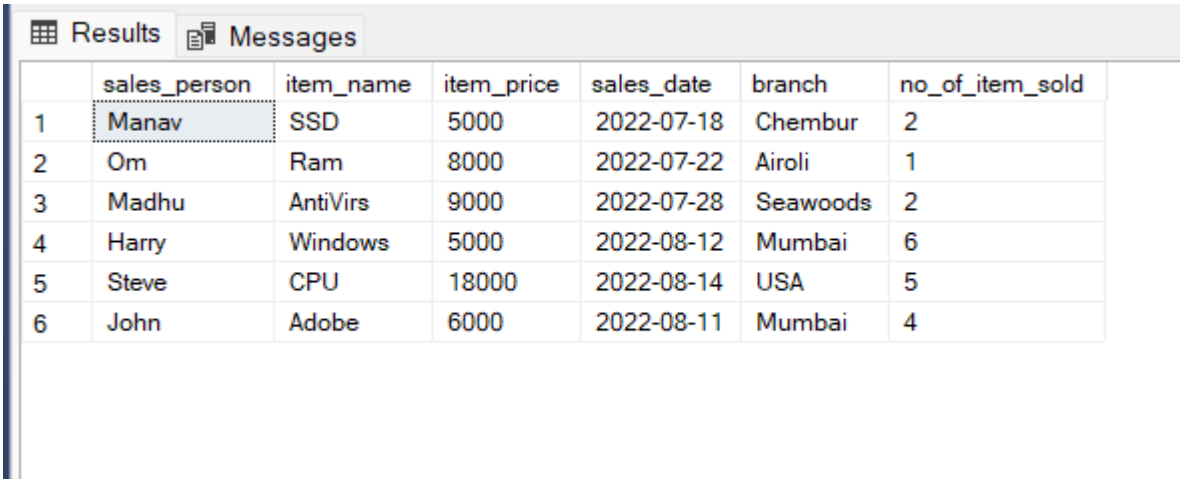
Implementation of ETL

Salest Table

Results Messages

	s_person	item_sold	price	s_dt	item_category	num_item_sold
1	Manav	3	14000	2022-12-12	hardware	4
2	Madhu	5	12000	2022-07-30	software	3
3	Om	1	11000	2022-07-28	software	2
4	XYZ	6	19000	2022-09-14	software	5
5	ABC	3	8000	2022-09-10	hardware	2
6	PQR	2	6000	2022-10-16	hardware	6
7	John	4	13000	2022-08-15	software	5

Sales Details

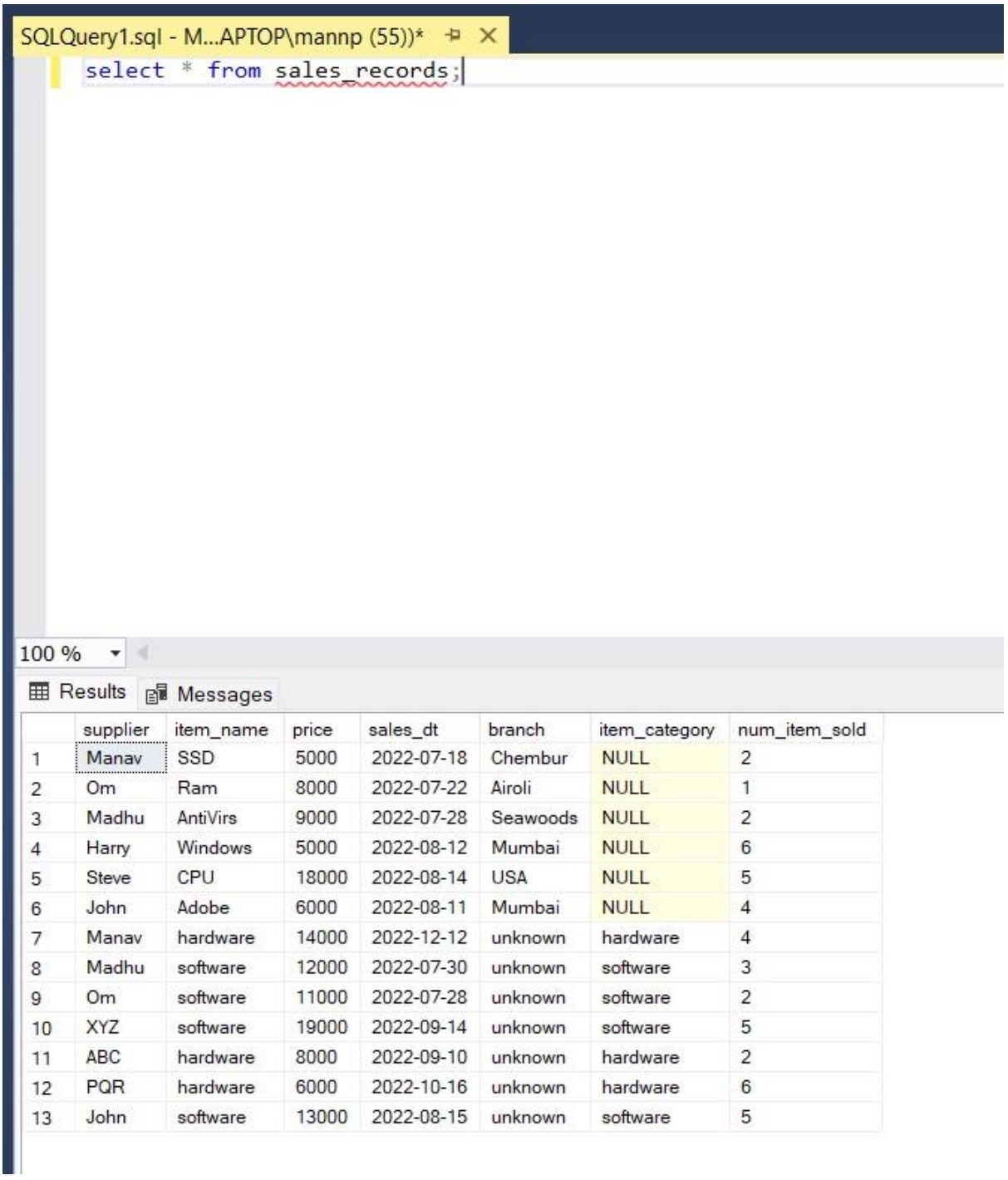


Results | Messages

	sales_person	item_name	item_price	sales_date	branch	no_of_item_sold
1	Manav	SSD	5000	2022-07-18	Chembur	2
2	Om	Ram	8000	2022-07-22	Airoli	1
3	Madhu	AntiVirs	9000	2022-07-28	Seawoods	2
4	Harry	Windows	5000	2022-08-12	Mumbai	6
5	Steve	CPU	18000	2022-08-14	USA	5
6	John	Adobe	6000	2022-08-11	Mumbai	4

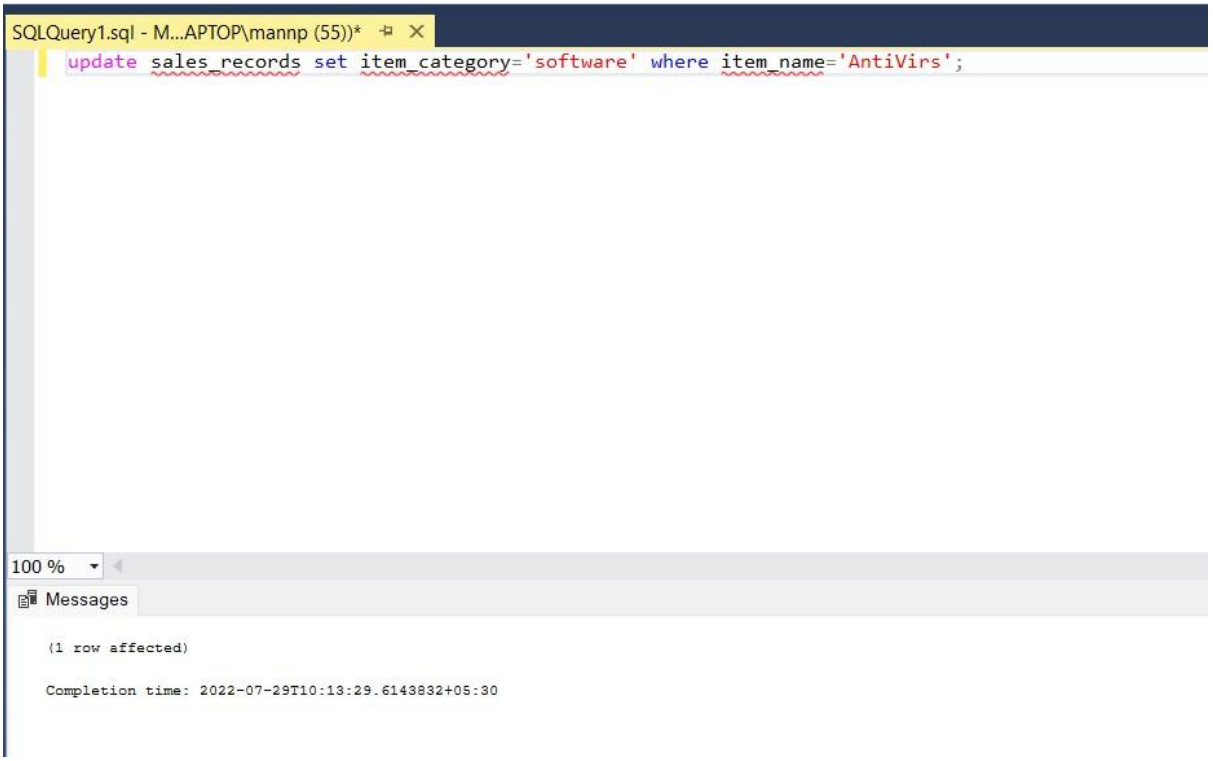
Extraction :-

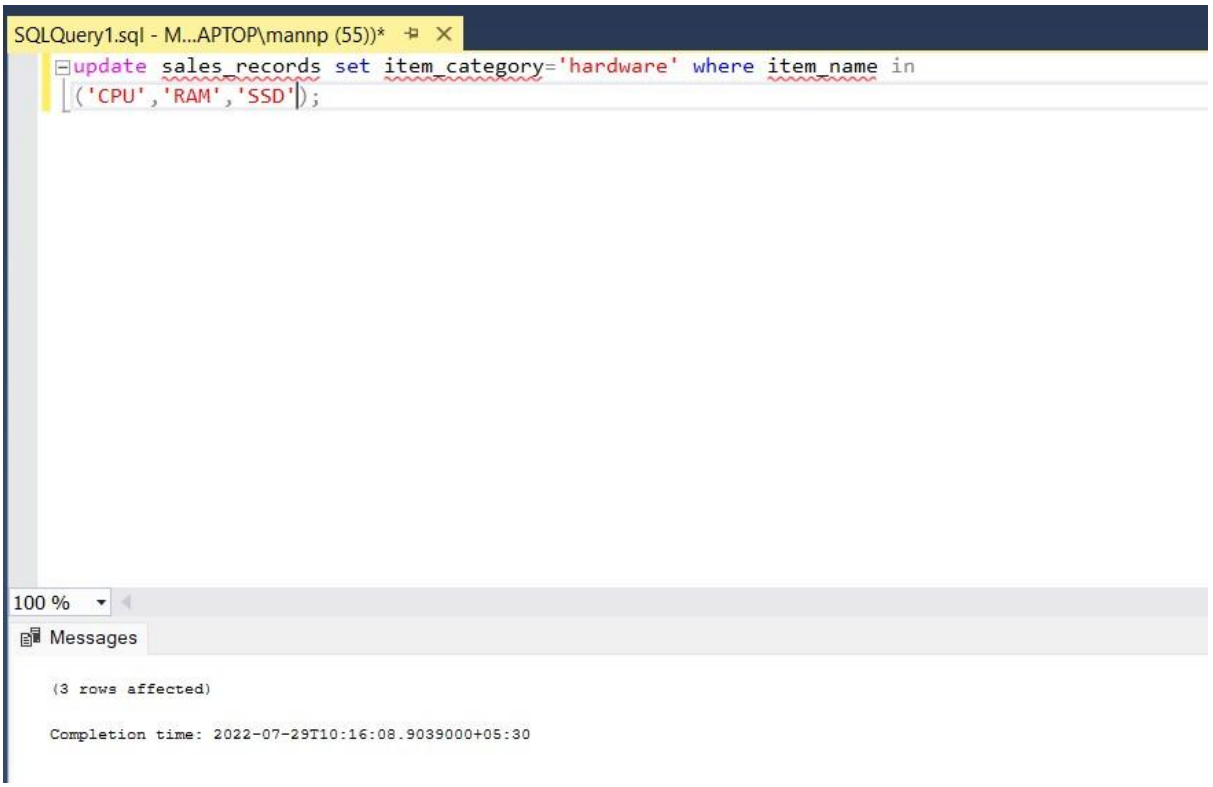
Sales Records Table



	supplier	item_name	price	sales_dt	branch	item_category	num_item_sold
1	Manav	SSD	5000	2022-07-18	Chembur	NULL	2
2	Om	Ram	8000	2022-07-22	Airoli	NULL	1
3	Madhu	AntiVirs	9000	2022-07-28	Seawoods	NULL	2
4	Harry	Windows	5000	2022-08-12	Mumbai	NULL	6
5	Steve	CPU	18000	2022-08-14	USA	NULL	5
6	John	Adobe	6000	2022-08-11	Mumbai	NULL	4
7	Manav	hardware	14000	2022-12-12	unknown	hardware	4
8	Madhu	software	12000	2022-07-30	unknown	software	3
9	Om	software	11000	2022-07-28	unknown	software	2
10	XYZ	software	19000	2022-09-14	unknown	software	5
11	ABC	hardware	8000	2022-09-10	unknown	hardware	2
12	PQR	hardware	6000	2022-10-16	unknown	hardware	6
13	John	software	13000	2022-08-15	unknown	software	5

Updating the item_category to hardware and software :-





Average no. of items sold

SQLQuery1.sql - M...APTOP\mannp (55))*

```
select * from sales_records
```

100 %

Results | Messages

	supplier	item_name	price	sales_dt	branch	item_category	num_item_sold
1	Manav	SSD	5000	2022-07-18	Chembur	hardware	3
2	Om	Ram	8000	2022-07-22	Airoli	hardware	3
3	Madhu	AntiVirs	9000	2022-07-28	Seawoods	software	2
4	Harry	Windows	5000	2022-08-12	Mumbai	NULL	6
5	Steve	CPU	18000	2022-08-14	USA	hardware	3
6	John	Adobe	6000	2022-08-11	Mumbai	NULL	4
7	Manav	hardware	14000	2022-12-12	unknown	hardware	4
8	Madhu	software	12000	2022-07-30	unknown	software	3
9	Om	software	11000	2022-07-28	unknown	software	2
10	XYZ	software	19000	2022-09-14	unknown	software	5
11	ABC	hardware	8000	2022-09-10	unknown	hardware	2
12	PQR	hardware	6000	2022-10-16	unknown	hardware	6
13	John	software	13000	2022-08-15	unknown	software	5

Final Sales Records Table :-

Results Messages

	supplier	item_name	price	sales_dt	branch	item_category	num_item_sold
1	Manav	SSD	5000	2022-07-18	Chembur	hardware	3
2	Om	Ram	8000	2022-07-22	Airoli	hardware	3
3	Madhu	AntiVirs	9000	2022-07-28	Seawoods	software	2
4	Harry	Windows	5000	2022-08-12	Mumbai	software	6
5	Steve	CPU	18000	2022-08-14	USA	hardware	3
6	John	Adobe	6000	2022-08-11	Mumbai	software	4
7	Manav	hardware	14000	2022-12-12	unknown	hardware	4
8	Madhu	software	12000	2022-07-30	unknown	software	3
9	Om	software	11000	2022-07-28	unknown	software	2
10	XYZ	software	19000	2022-09-14	unknown	software	5
11	ABC	hardware	8000	2022-09-10	unknown	hardware	2
12	PQR	hardware	6000	2022-10-16	unknown	hardware	6
13	John	software	13000	2022-08-15	unknown	software	5

Loading :-

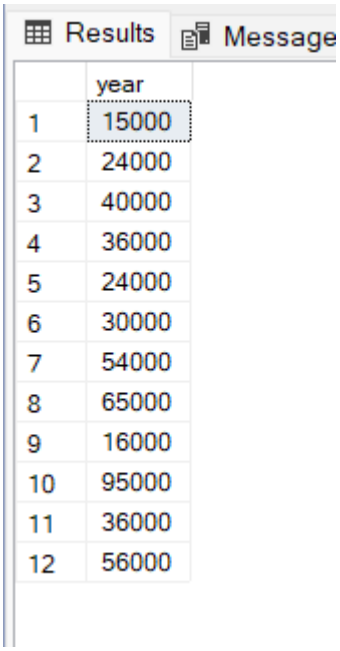
```
create view category as(select * from sales_records where
item_category='software');
```

Select * from category;

Results Messages

	supplier	item_name	price	sales_dt	branch	item_category	num_item_sold
1	Madhu	AntiVirs	9000	2022-07-28	Seawoods	software	2
2	Harry	Windows	5000	2022-08-12	Mumbai	software	6
3	John	Adobe	6000	2022-08-11	Mumbai	software	4
4	Madhu	software	12000	2022-07-30	unknown	software	3
5	Om	software	11000	2022-07-28	unknown	software	2
6	XYZ	software	19000	2022-09-14	unknown	software	5
7	John	software	13000	2022-08-15	unknown	software	5

create view catalog1 as (select sum(price*num_item_sold) as year from sales_records group by (sales_dt));


Results Message

	year
1	15000
2	24000
3	40000
4	36000
5	24000
6	30000
7	54000
8	65000
9	16000
10	95000
11	36000
12	56000