

Task - 1

- 1.perform all aggregate functions in a single table**
- 2.connect the two tables**
- 3.connect more then two tables**

```
use 10kcoders;
create table agg(
sno int,
product_dept varchar(100),
product varchar(100),
quantity int,
price int
);
insert into agg values
(1, 'Electronics', 'Mobile', 2, 15000),
(2, 'Electronics', 'Laptop', 1, 55000),
(3, 'Groceries', 'Rice', 5, 60),
(4, 'Groceries', 'Milk', 3, 40),
(5, 'Clothing', 'T-Shirt', 4, 500),
(6, 'Clothing', 'Jeans', 2, 1500),
(7, 'Electronics', 'Headphones', 3, 1200),
(8, 'Furniture', 'Chair', 2, 2500),
(9, 'Furniture', 'Table', 1, 5500),
(10, 'Electronics', 'Charger', 4, 600);

select*from agg;
-- .perform all aggregate functions in a single table
select sum(quantity) ,avg(price),min(price),max(price),count(product_dept) from agg;

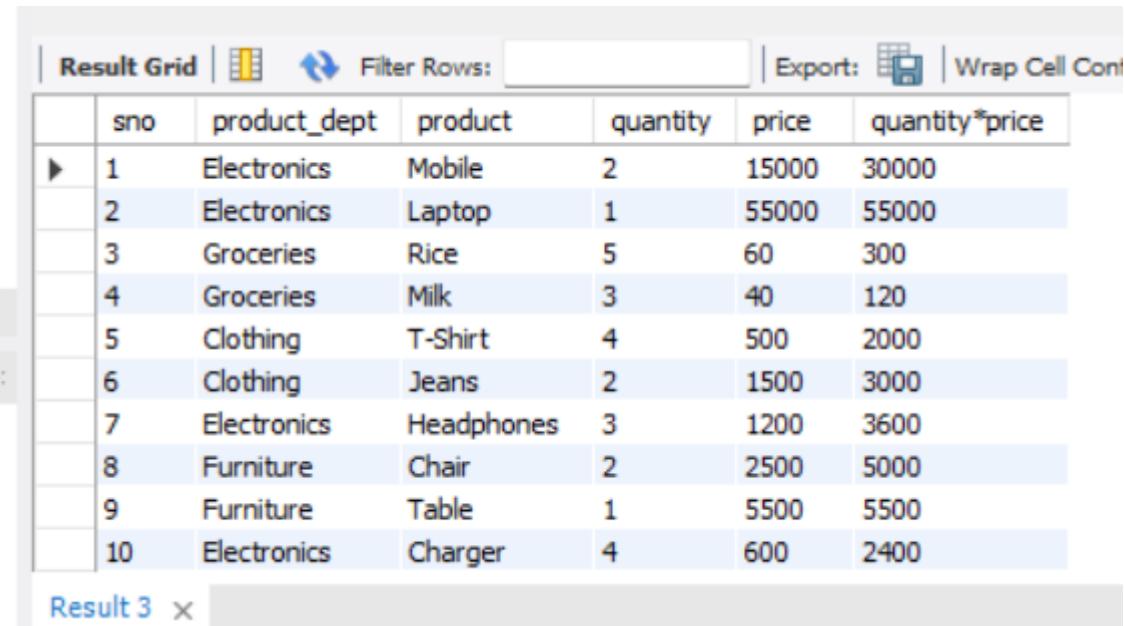
-- connecting two tables
create table parent_table(
idno int primary key,
name varchar(100),
phone bigint
);
create table child_table(
idno int,
emailid varchar(100),
foreign key (idno) references parent_table(idno)
);
```

```
-- connecting 3 tables
create table sub_child_table(
emailid varchar(100),
address varchar(100),
dob date,
foreign key (emailid) references child_table(emailid)
);
```

Task - 2

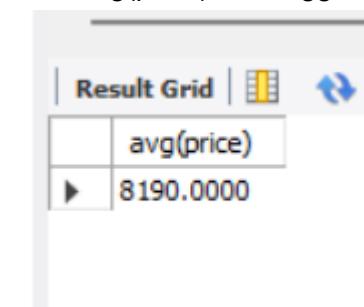
Task2

-- Write a query to compute the total revenue (Quantity × Price for each record).
select *, quantity*price from agg;



	sno	product_dept	product	quantity	price	quantity*price
▶	1	Electronics	Mobile	2	15000	30000
	2	Electronics	Laptop	1	55000	55000
	3	Groceries	Rice	5	60	300
	4	Groceries	Milk	3	40	120
	5	Clothing	T-Shirt	4	500	2000
	6	Clothing	Jeans	2	1500	3000
	7	Electronics	Headphones	3	1200	3600
	8	Furniture	Chair	2	2500	5000
	9	Furniture	Table	1	5500	5500
	10	Electronics	Charger	4	600	2400

-- Write a query to find the average price of products.
select avg(price) from agg;



	avg(price)
▶	8190.0000

-- Write a query to count how many sales belong to the Electronics category.
select count(product) from agg where product_dept = "Electronics" ;

Result Grid	
	Filter
	count(product)
▶	4

-- Write a query to find the maximum quantity sold in a single sale.
select max(quantity) from agg;

Result Grid	
	Filter
	max(quantity)
▶	5

-- Write a query that shows for each product:
select product,sum(quantity),sum(quantity*price),avg(price) from agg group by product ;

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	product	sum(quantity)	sum(quantity*price)	avg(price)
▶	Mobile	2	30000	15000.0000
	Laptop	1	55000	55000.0000
	Rice	5	300	60.0000
	Milk	3	120	40.0000
	T-Shirt	4	2000	500.0000
	Jeans	2	3000	1500.0000
	Headphones	3	3600	1200.0000
	Chair	2	5000	2500.0000
	Table	1	5500	5500.0000
	Charger	4	2400	600.0000

Result 10 ×

-- total quantity sold
select count(quantity) from agg;

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	count(quantity)			
▶	10			

```
-- total revenue  
select sum(quantity*price) as total_revenue from agg ;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	total_revenue			

▶ 106920

```
-- average price  
select avg(price) from agg;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	avg(price)			

▶ 8190.0000