**Name: Tejal Shetty**

**Subject: My SQL Essentials**

**Project: Ecommerce**

**Topic: Online\_Store**

**Introduction:**

My Project is regarding online store. As Nowadays, online shopping is trending so to have a seamless shopping experience for customers, I have created 5 tables such as Employees, Customers, Orders,

Products and Sales. The order table has a foreign key that connect to Employees and Customer table respectively also Sales table has a foreign key connected to Products table. The relationship between the tables helps to maintain data integrity and enables to access data and retrieve information.

Following are the steps that how I have created database in which I have tables also with the help of query, constraints, functions and etc. I have got the output: -

1. I have created a database :- Online\_Store
2. Five tables are Employees, Customers, Orders, Products & Sales.

Following are the columns respectively:-

* Employees- Employee\_Id, Name, Email, department, hire\_date.
* Customers-Customer\_id ,Name, Email, address, Contact\_number.
* Orders- order\_id, customer\_id, Employee\_id, order\_date, Status.
* Products-Product-id,name,description,price.
* Sales- Sales\_id,Product\_id,Quantity,sales\_date.

Create database Online\_Store;

Use Online\_Store;

Create table Employees (

Employee\_id int auto\_increment primary key,

EmpName varchar(50),

Email varchar(50),

Department varchar(50),

hire\_date date );

Create table Customers (

customer\_id int primary key,

name varchar(50) not null,

email varchar(50) not null unique,

address varchar(50),

contact\_number varchar(11)not null

);

Create table Orders (

order\_id int auto\_increment primary key,

customer\_id int,

Employee\_id int,

order\_date date,

status varchar(50),

foreign key (Employee\_id) references Employees(Employee\_id),

foreign key (Customer\_id) references Customers(customer\_id)

);

Create table Products (

Product\_id int auto\_increment primary key,

Name\_id int,

name varchar(50),

description varchar(50),

Price decimal(10,2)

);

Create table Sales (

Sale\_id int primary key,

Product\_id int,

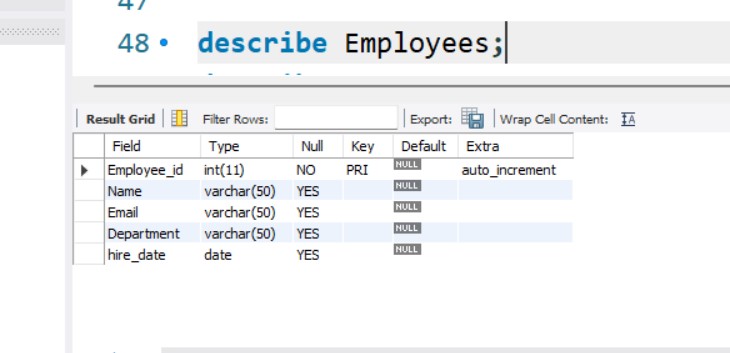
Quantity int,

sale\_date date,

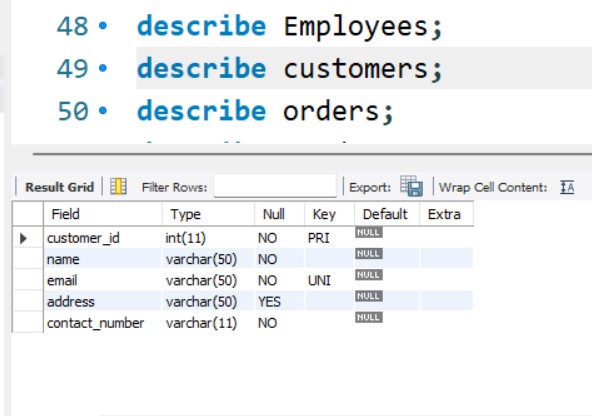
foreign key (Product\_id) references Products(Product\_id)

);

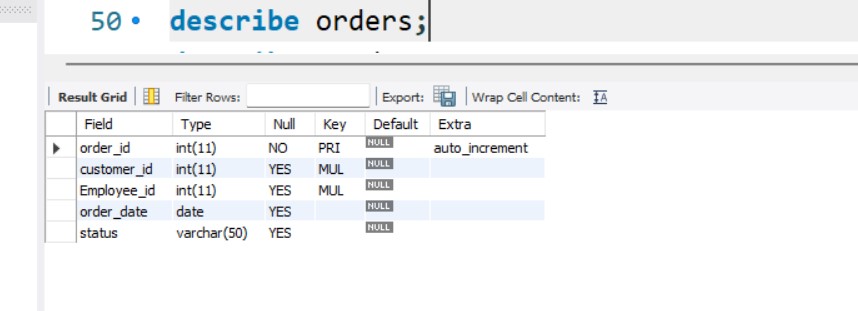
**describe Employees;**



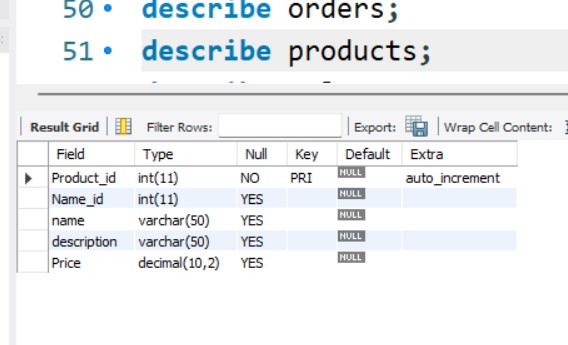
**describe customers;**



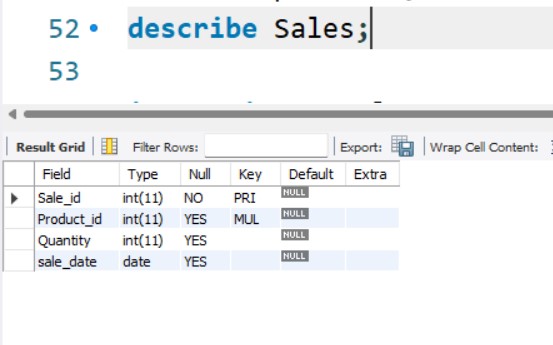
**describe orders;**



**describe products;**



**describe Sales;**



**insert into Employees**

**(EmpName,Email,department,hire\_date)**

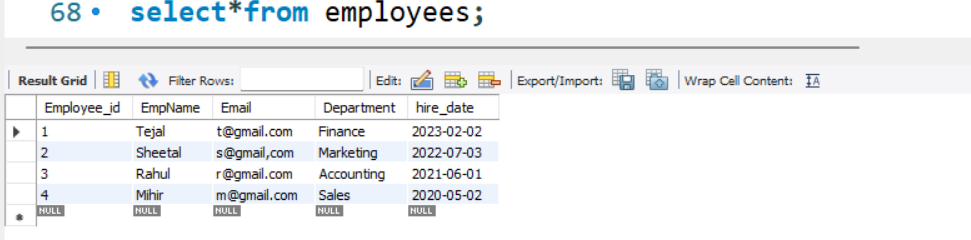
**values**

**("Tejal","t@gmail.com","Finance","2023-02-02"),**

**("Sheetal","s@gmail,com","Marketing","2022-07-03"),**

**("Rahul","r@gmail.com","Accounting","2021-06-01"),**

**("Mihir","m@gmail.com","Sales","2020-05-02");**

****

**insert into customers**

**(Customer\_id,name,email,address,contact\_number)**

**values**

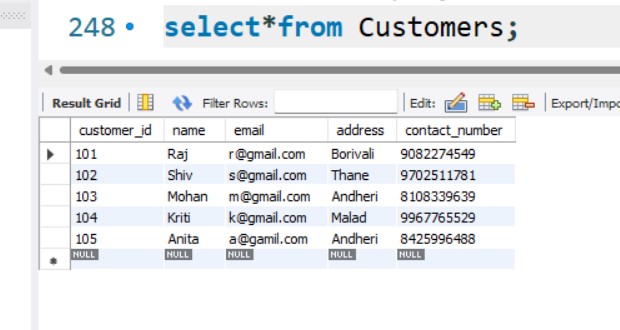
**(101,"Raj","r@gmail.com","Borivali","9082274549"),**

**(102,"Shiv","s@gmail.com","Thane","9702511781"),**

**(103,"Mohan","m@gmail.com","Andheri","8108339639"),**

**(104,"Kriti","k@gmail.com","Malad","9967765529"),**

**(105,"Anita","a@gamil.com","Andheri","8425996488");**



**insert into orders**

**(customer\_id,employee\_id,order\_date,status)**

**values**

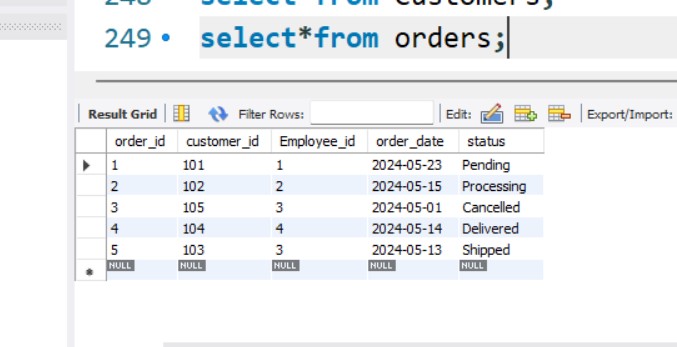
**(101,1,"2024-05-23","Pending"),**

**(102,2,"2024-05-15","Processing"),**

**(105,3,"2024-05-01","Cancelled"),**

**(104,4,"2024-05-14","Delivered"),**

**(103,3,"2024-05-13","Shipped");**



**insert into Products**

**(name\_id,name,description,Price)**

**values**

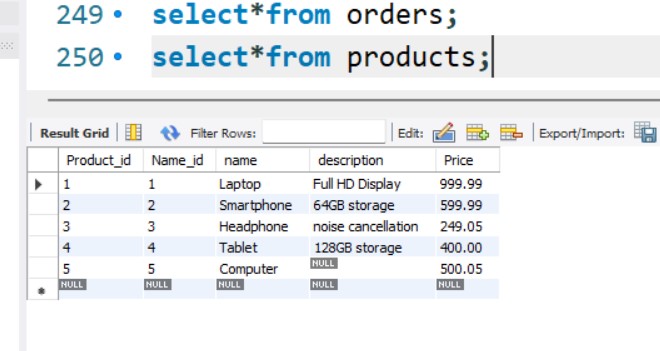
**(1,"Laptop","Full HD Display",999.99),**

**(2,"Smartphone","64GB storage",599.99),**

**(3,"Headphone","noise cancellation",249.05),**

**(4,"Tablet","128GB storage",400.00),**

**(5,"Computer",null,500.05);**



**insert into Sales**

**(Sale\_id,Product\_Id,Quantity,Sale\_date)**

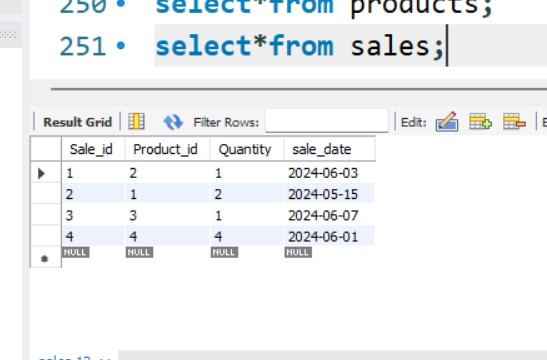
**values**

**(1,2,1,"2024-06-03"),**

**(2,1,2,"2024-05-15"),**

**(3,3,1,"2024-06-07"),**

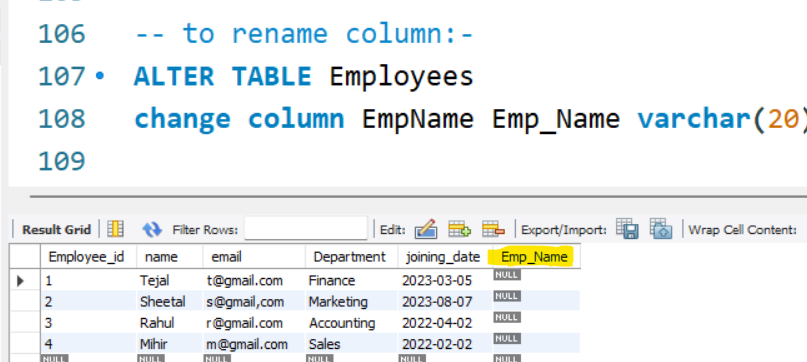
**(4,4,4,"2024-06-01");**



**-- to rename column:-**

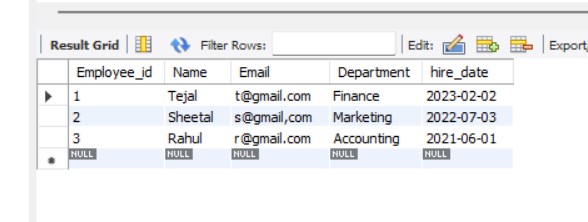
**ALTER TABLE Employees**

**change column EmpName Emp\_Name varchar(20);**



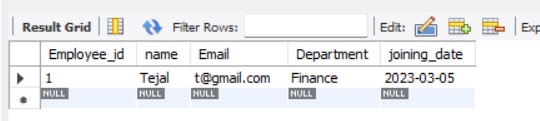
**-- to limit clause:-**

**Select\*from Employees limit 3;**



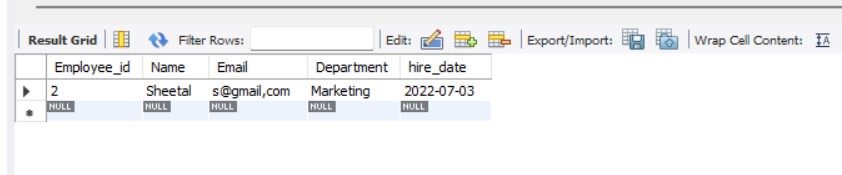
**-- where clause:-**

**Select\*from Employees where name = "Tejal";**

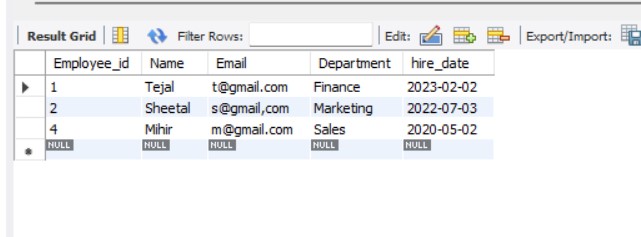


**-- Comparison operaters on numerical data:-**

**Select\*from Employees where department ="Marketing";**

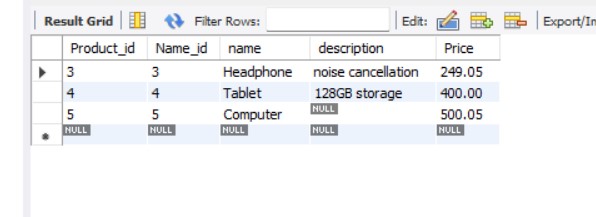


**Select\*from Employees where Employee\_Id!=3;**

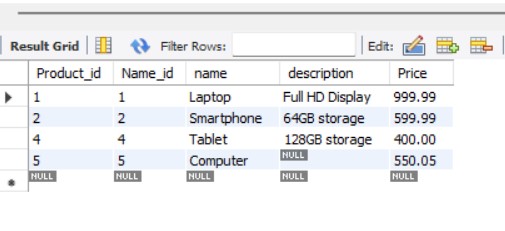


**select\*from products;**

**Select\*from Products where Price< 599.99;**

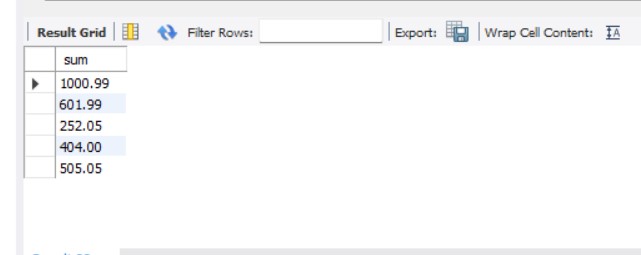


**Select\*from Products where Price>=400.00;**



**-- Arithmatics:-**

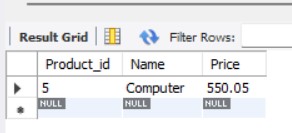
**Select Product\_id + Price as sum from products;**



**-- to test null values and is not null values:-**

**Select Product\_id , Name , Price from Products**

**where Description is null;**



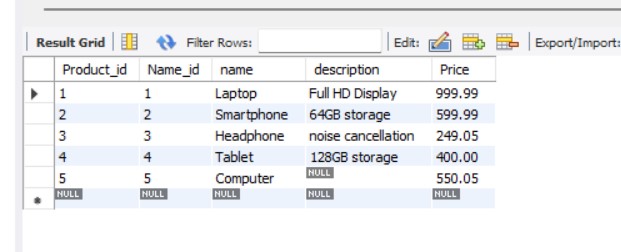
**-- update existing records in table**

**SET SQL\_SAFE\_UPDATES = 0;**

**update products**

**set Price = 550.05**

**where name ="Computer";**

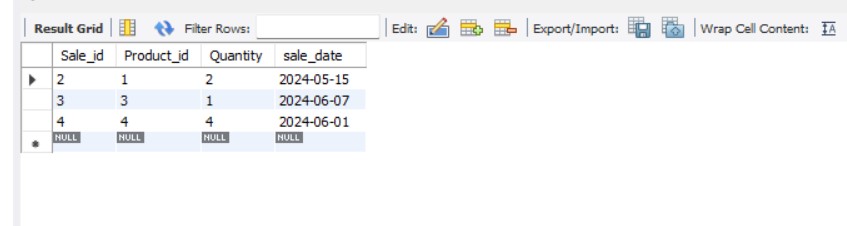


**select\*from products;**

**select\*from sales;**

**-- to delete existing record in a table:-**

**delete from sales where sale\_id=1;**



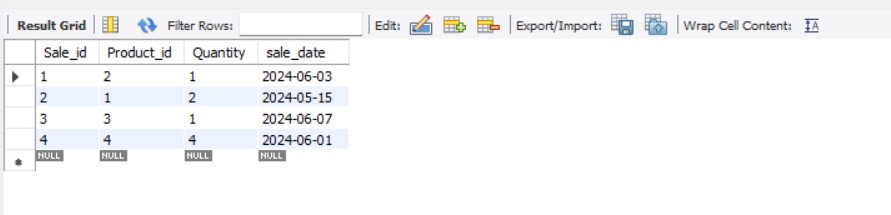
**-- insert row or add row in a table:-**

**insert into Sales**

**(Sale\_id,Product\_Id,Quantity,Sale\_date)**

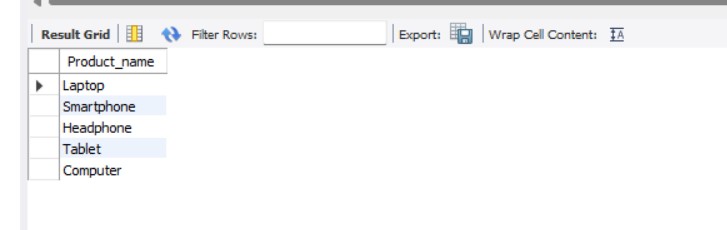
**values**

**(1,2,1,"2024-06-03");**



**-- Aliases:-**

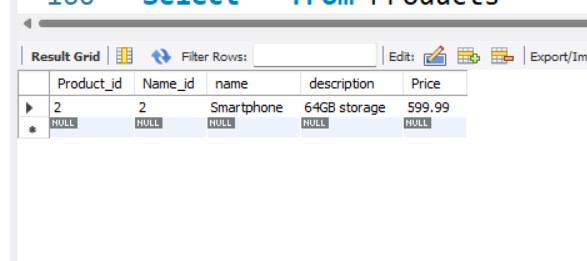
**Select name as Product\_name from products;**



**-- Logical operators:-**

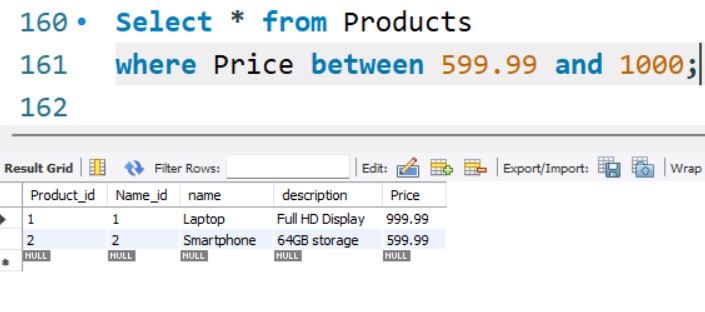
**Select \* from products**

**where name like "S%";**



**Select \* from Products**

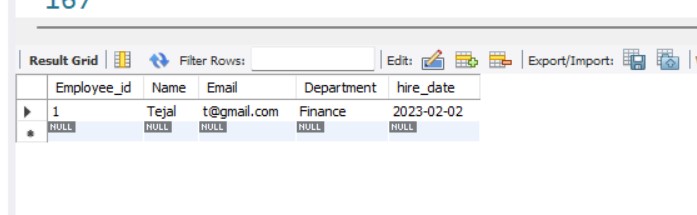
**where Price between 599.99 and 1000;**



**Select\*from Employees;**

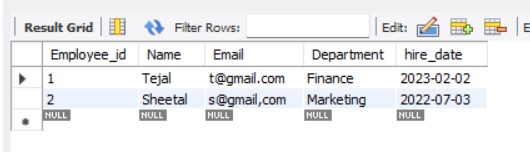
**Select \* from Employees**

**where Name="Tejal" and department="Finance";**



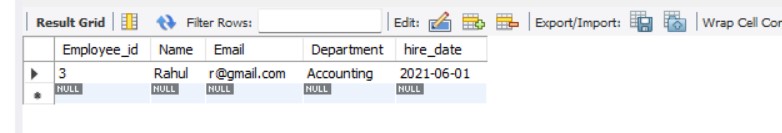
**Select \* from Employees**

**where Name="Tejal" or department="Marketing";**



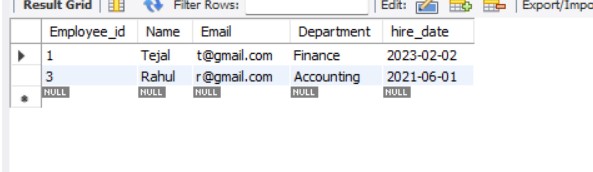
**Select \* from Employees**

**where (Name="Sheetal" and Department="Finance") or name="Rahul";**



**Select \* from Employees**

**where name in("Rahul","Tejal");**

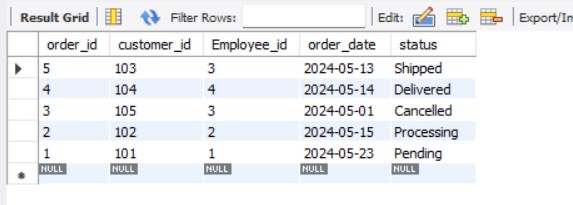


**-- order by**

**select\*from orders;**

**Select \* from orders**

**order by order\_id desc;**



**-- Aggregate functions:-**

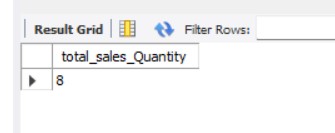
**select\*from customers;**

**select count(name) as customer\_name from customers;**

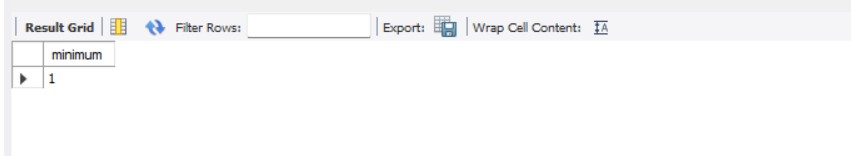


**select\*from Sales;**

**select sum(Quantity) as total\_sales\_Quantity from sales;**



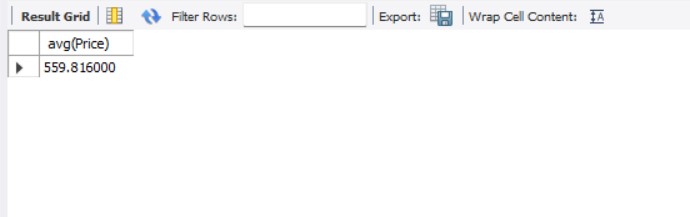
**select min(Quantity) as minimum from sales;**



**-- to find the avg of price:-**

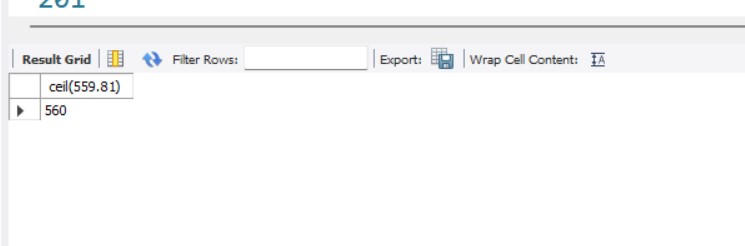
**select\* from products;**

**select avg(Price) from Products;**



**-- to roundoff the avg amount:-**

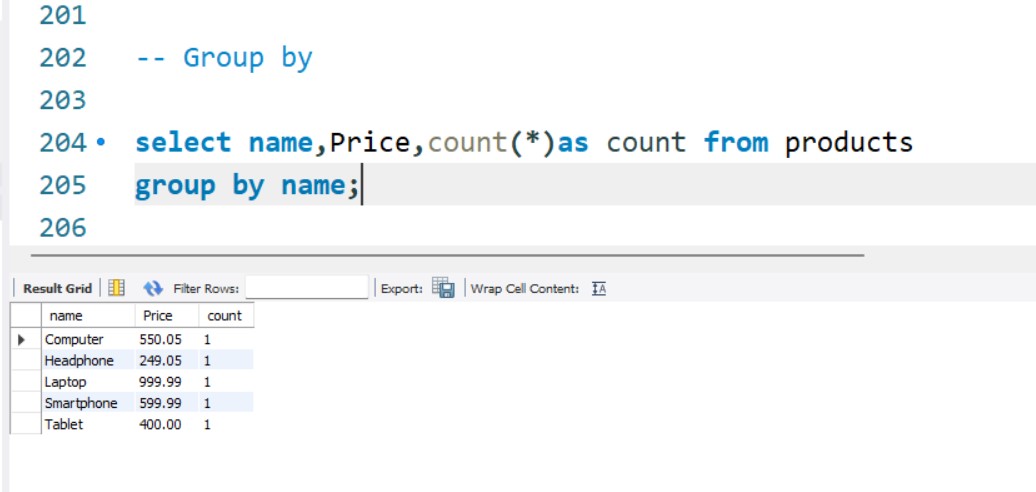
**select ceil(559.81);**



**-- Group by**

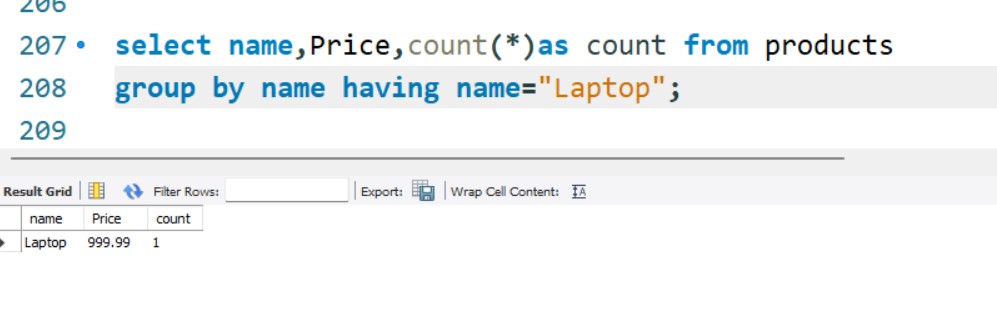
**select name,Price,count(\*)as count from products**

**group by name;**



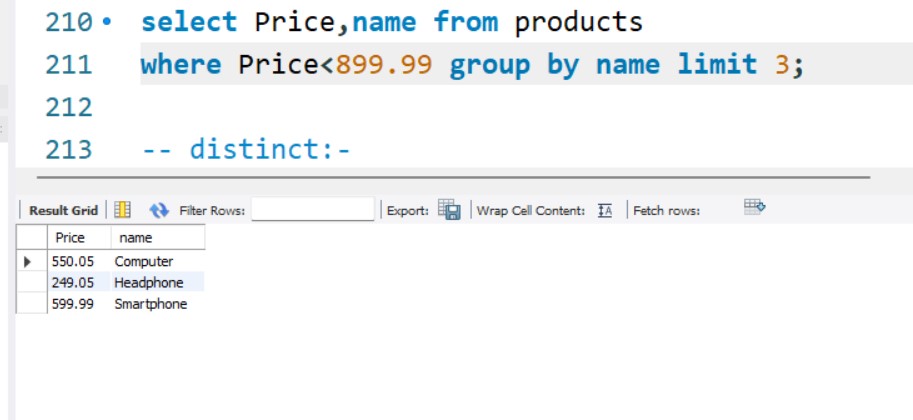
**select name,Price,count(\*)as count from products**

**group by name having name="Laptop";**



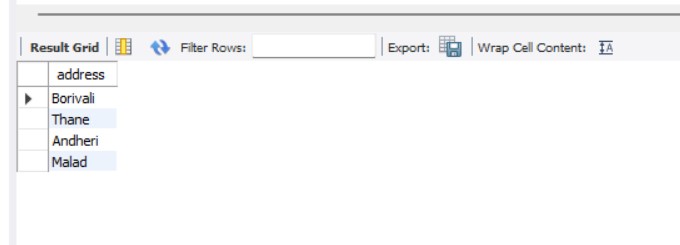
**select Price,name from products**

**where Price<899.99 group by name limit 3;**



**-- distinct:-**

**select distinct address from Customers;**



**-- Joins:-**

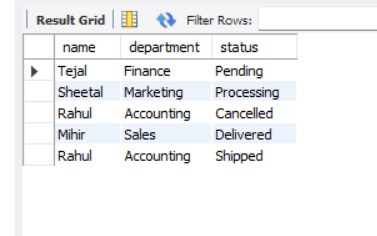
**select\*from employees;**

**select\*from customers;**

**select\*from orders;**

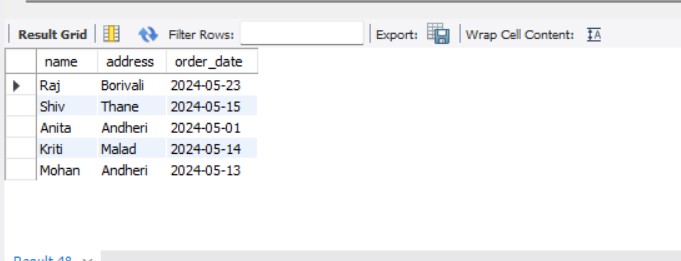
**Select e.name,e.department,o.status from orders o inner join employees e**

**on o.employee\_id = e.employee\_id;**



**select c.name,c.address,o.order\_date from orders o right join customers c**

**on o.customer\_id = c.customer\_id;**

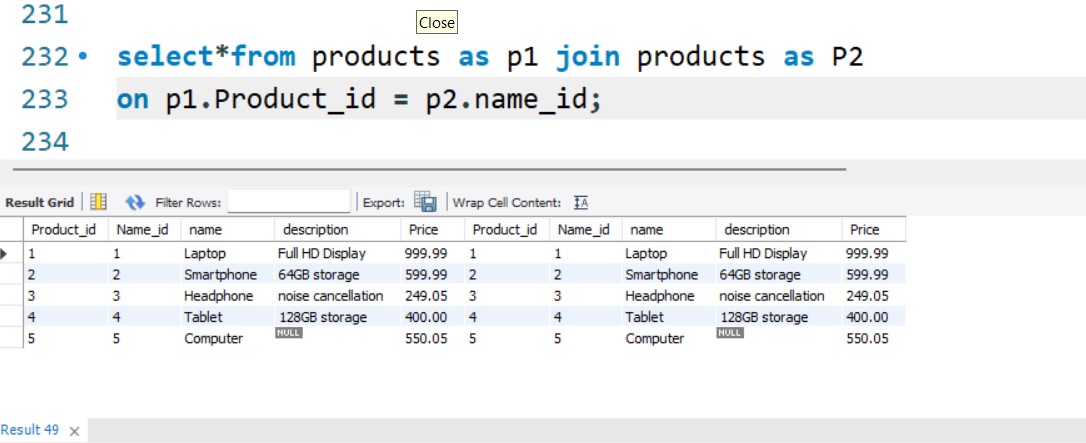


**select\*from products;**

**select\*from sales;**

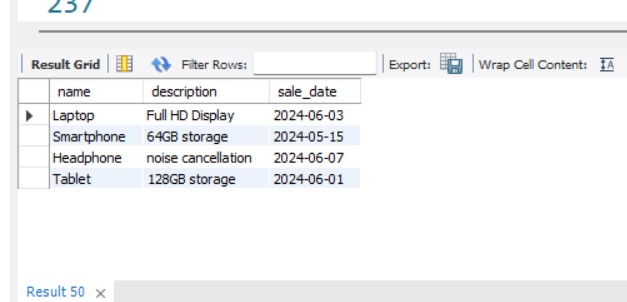
**select\*from products as p1 join products as P2**

**on p1.Product\_id = p2.name\_id;**



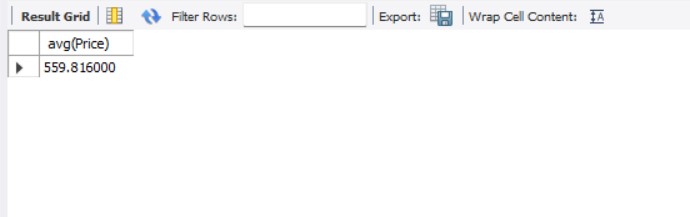
**select p.name,p.description,s.sale\_date from sales s left join products P**

**on P.Product\_id = s.sale\_id;**



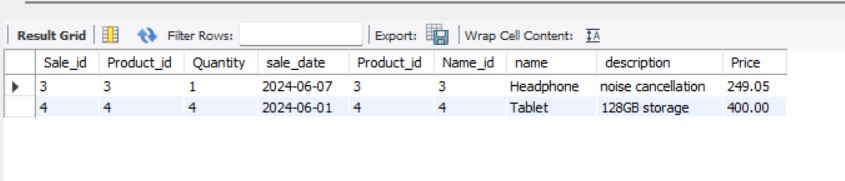
**-- Sub Query:-**

**select avg(price) from products;**

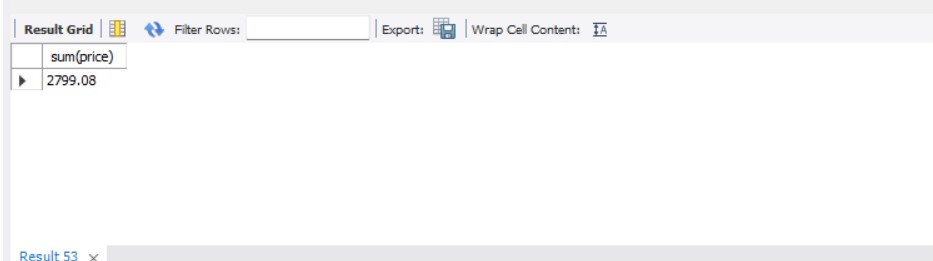


**select \* from sales inner join products on Products.Product\_id = Sales.sale\_id**

**where products.price < (select avg(price) from products);**

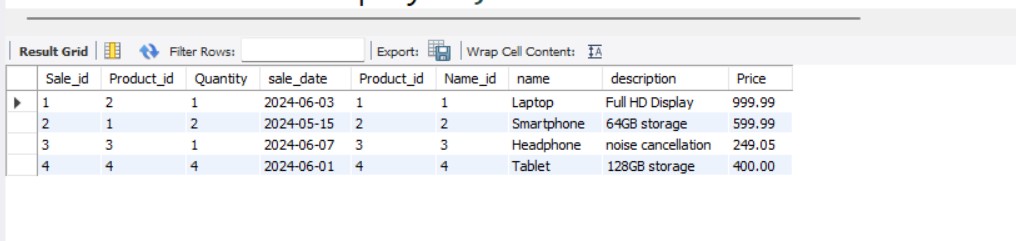


**select sum(price) from products;**



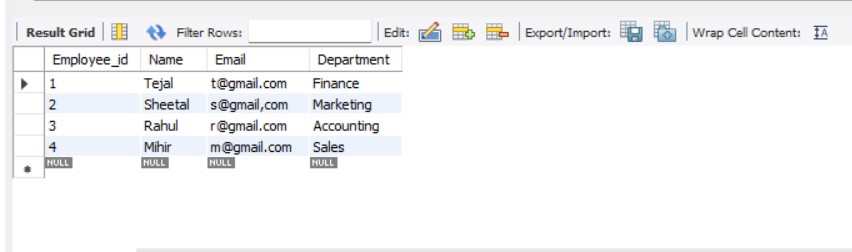
**select \* from sales inner join products on Products.Product\_id = Sales.sale\_id**

**where products.price < (select sum(price) from products);**



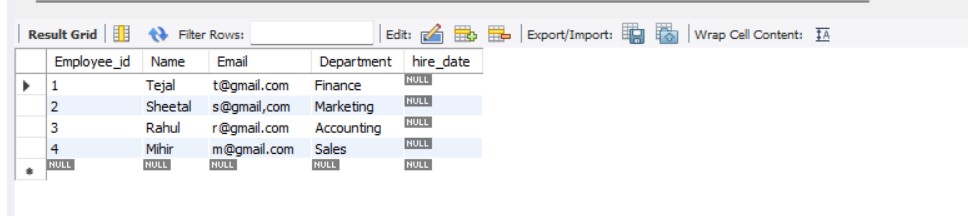
**alter table Employees**

**drop column hire\_date;**



**alter table Employees**

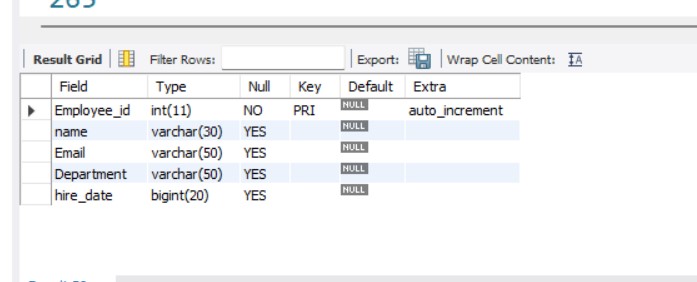
**add hire\_date bigint;**



**alter table employees**

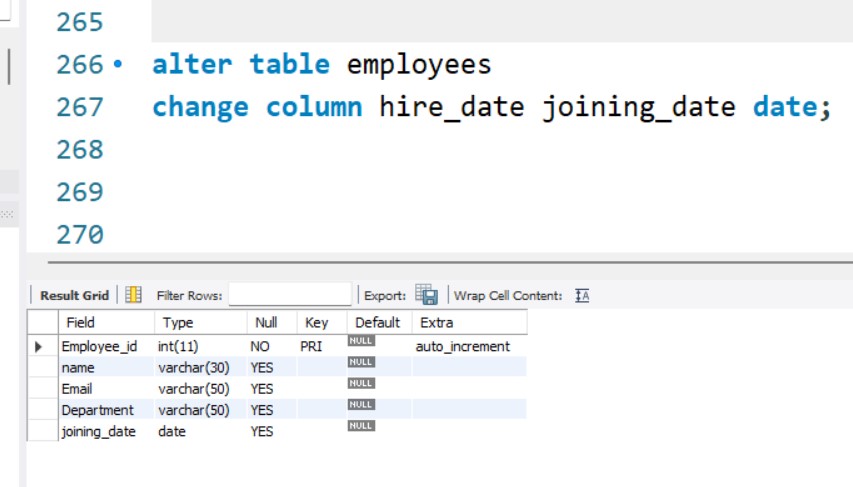
**modify column name varchar(30);**

**desc employees;**



**alter table employees**

**change column hire\_date joining\_date date;**



**update Employees**

**set joining\_date = "2022-02-02"**

**where name ="Mihir";**

**table made for truncate query:-**

**Create table Festiv\_offers**

**(id int auto\_increment primary key,**

**isdiscount boolean);**

**insert into festiv\_offers**

**(isdiscount)**

**values**

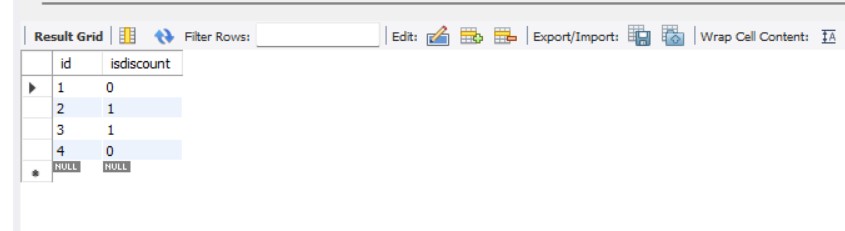
**(0),**

**(1),**

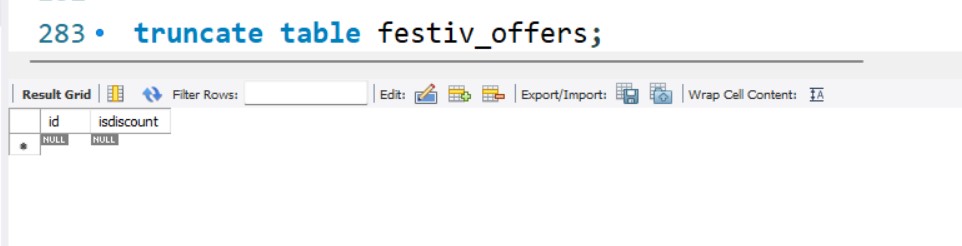
**(1),**

**(0);**

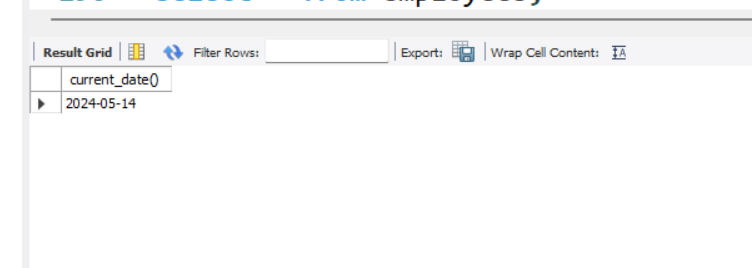
**select\*from festiv\_offers;**



**truncate table festiv\_offers;**

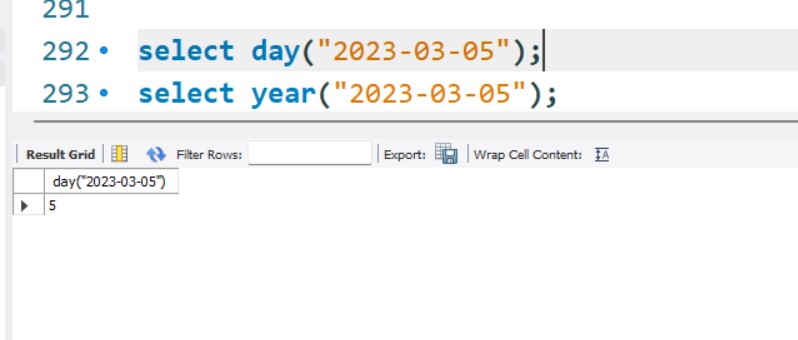


**select current\_date();**

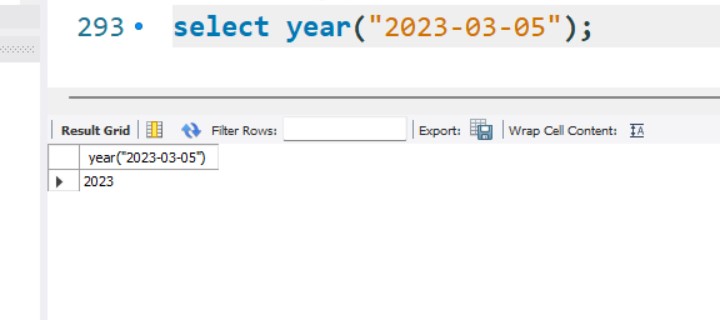


**select \* from employees;**

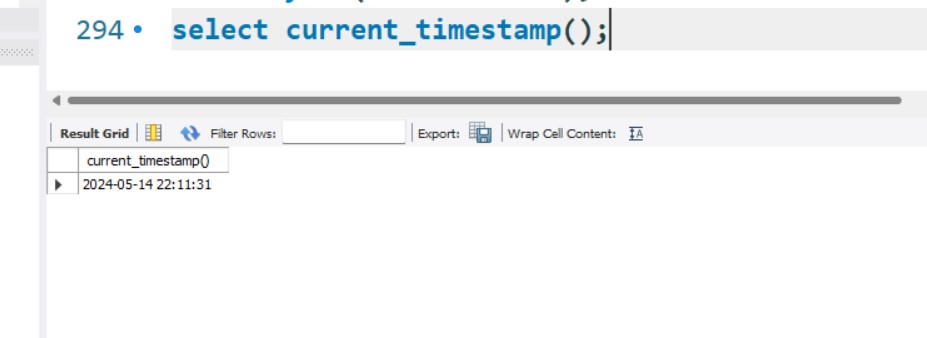
**select day("2023-03-05");**



**select year("2023-03-05");**



**select current\_timestamp();**



**---------------------------------------------xxxx---------------------------------------------**