

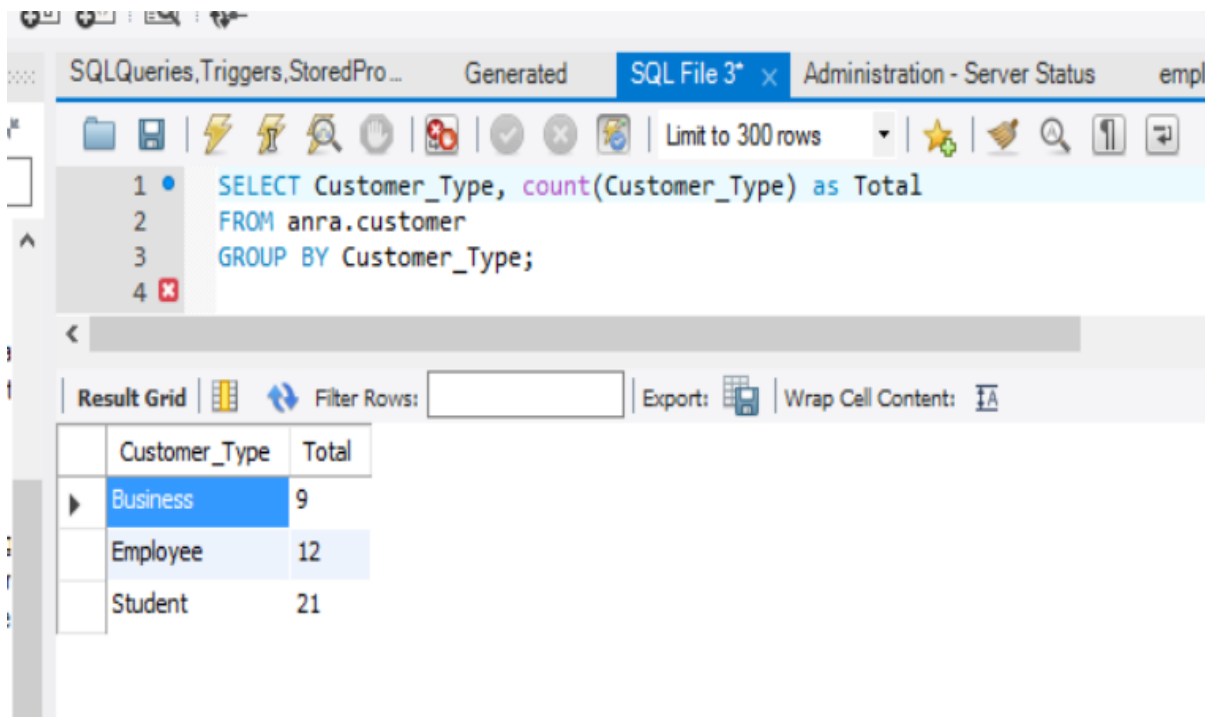
◆ Database Management for Retail Application:-

Reports generated doing the analysis will contain the following:

--QUERIES:-

--Query1 --Find how many customers are there group by category?

```
SELECT Customer_Type, count(Customer_Type) as Total
FROM anra.customer
GROUP BY Customer_Type;
```



The screenshot shows a SQL query editor window with a toolbar at the top containing icons for file operations, execution, and search. The query text is as follows:

```
1 SELECT Customer_Type, count(Customer_Type) as Total
2 FROM anra.customer
3 GROUP BY Customer_Type;
4
```

Below the query editor, the 'Result Grid' tab is active, displaying the results of the query in a table format. The table has two columns: 'Customer_Type' and 'Total'. The results are as follows:

Customer_Type	Total
Business	9
Employee	12
Student	21

--Query2 --Find 2 apartments whose name is emerald or their id is 11003?

```
SELECT Address_ID, Apartment_Name, Zipcode_ID
FROM anra.address
WHERE (Apartment_Name= 'Emerald' OR Zipcode_ID = '11003')
ORDER BY Zipcode_ID DESC
Limit 2;
```

--Query3 --Find the supplied product count and their group for each product ?

```
Select anra.supplier.Supplier_ID,anra.supplier.Supplier_Name,
Count(anra.product.Group_ID) AS `Product Count`, anra.`product
group`.Group_Name
From anra.supplier
inner join anra.product
on anra.supplier.Supplier_ID=anra.product.Supplier_ID
inner join anra.`product group`
on anra.product.Group_ID=anra.`product group`.Group_ID
Group by Supplier_ID Asc
```

--Query4 --Total number of orders to be shipped immediate and is partially Shipped?

```
SELECT Order_ID, Order_Date,`Status`,count(Order_ID) as Total
FROM anra.orders
WHERE (Shippent_Duration= 'Immediate' and `Status`='Partially Shipped')
ORDER BY Order_ID DESC;
```

--Query5-- List of products by department which has high defect% ?

```

SELECT anra.reviews.Product_ID,anra.product.Product_Name,
MAX(anra.reviews.`Defect%`) As `Defect%`, anra.`product group`.Group_Name
from anra.reviews
inner join anra.product
on anra.reviews.Product_ID=anra.product.Product_ID
inner join anra.`product group`
on anra.product.Group_ID=anra.`product group`.Group_ID
Group by `product group`.Group_ID

```

--Query6 -- Total amount of revenue earned with respect to their purchasing modes?

```

Select count(Payment_Mode) As Total_Cutomers,
anra.payment.Payment_Mode,Sum(anra.bill.Amount_Paid)
As Total_Amount
from anra.payment
inner join
anra.bill
on anra.payment.Payment_ID=anra.bill.Payment_ID
group by Payment_Mode

```

--Query7 -- Find The quantity of products available whose status is in progress and shipment duration is immediate?

```

SELECT anra.product.Product_Name,anra.product.Available_Number,`order
product`.Quantity,orders.Order_Date, orders.`Status`,orders.Shippent_Duration
from anra.orders
inner join anra.`order product`
on anra.orders.Order_ID=anra.`order product`.Order_ID
inner join anra.product
on anra.`order product`.Product_ID=anra.product.Product_ID

```

where orders.`Status`='In Progress' and orders.Shippent_Duration='Immediate';

--Query8 --Find the names and defect% order by defect% ?

```
SELECT Product_Name,`Defect%`  
FROM anra.product  
INNER JOIN anra.reviews  
ON anra.reviews.Product_ID=anra.product.Product_ID  
ORDER BY `Defect%` Desc;
```

--Query9 --Find Customers payment ID,mode, vocher applied and their visist number?

```
SELECT anra.bill.Voucher_id, anra.payment.Payment_ID, anra.payment.Payment_Mode,  
anra.payment.Visit_Number  
FROM anra.bill,anra.payment  
WHERE anra.payment.Payment_ID=anra.bill.Payment_ID  
AND anra.bill.Amount_Paid> 1000;
```

--Query10 --Find product and their respective colour?

```
SELECT Product_Name, Colour  
FROM anra.`product details`  
INNER JOIN anra.product  
ON anra.`product details`.Product_ID=anra.product.Product_ID order by colour
```

--Query11

--Find the product Names their respective groups?

```
SELECT  
Group_Name, Product_Name
```

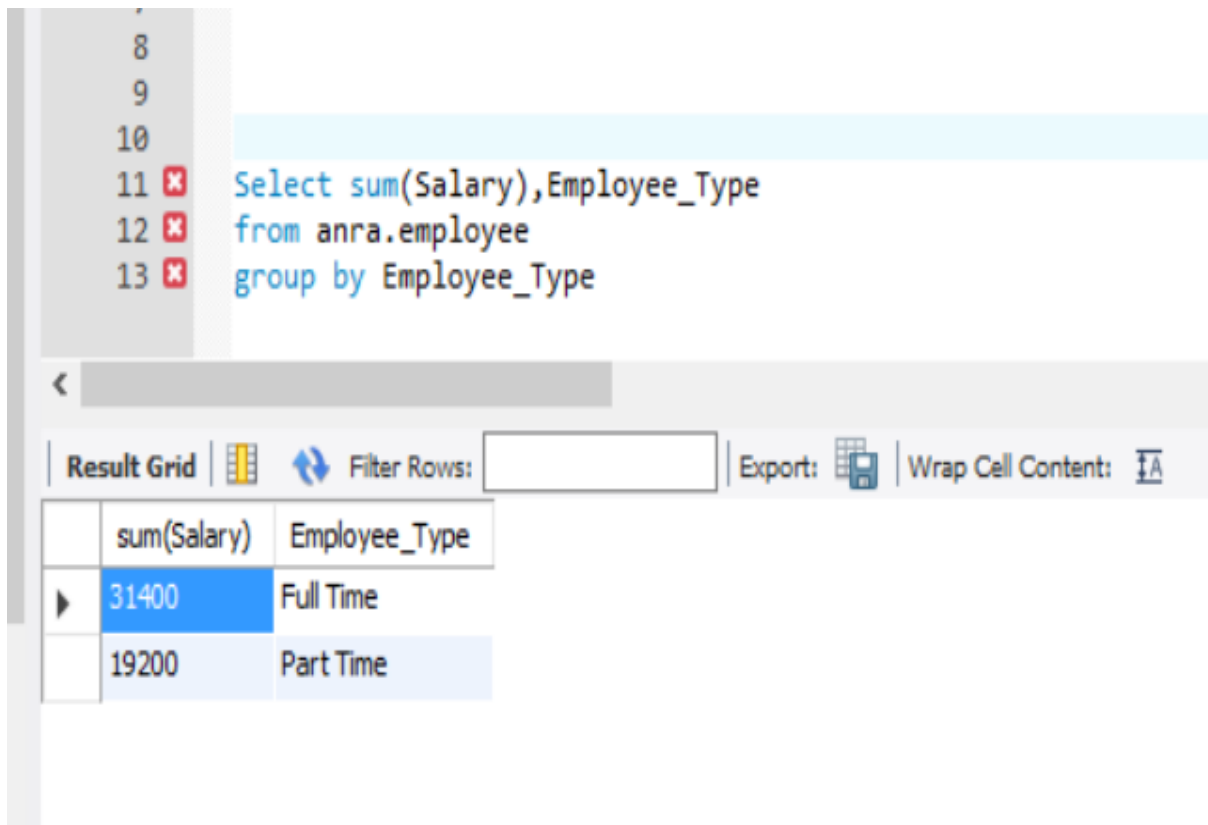
FROM anra.`product group`

INNER JOIN anra.product

ON anra.`product group`.Group_ID=anra.product.Group_ID Order by Group_Name

--Query12

--Find Total salaries paid to each employee type?



The screenshot shows a SQL query editor with the following code:

```
8  
9  
10  
11 select sum(Salary),Employee_Type  
12 from anra.employee  
13 group by Employee_Type
```

Below the query editor, the results are displayed in a table with the following data:

sum(Salary)	Employee_Type
31400	Full Time
19200	Part Time

The interface also includes a 'Result Grid' tab, a 'Filter Rows' input field, and buttons for 'Export' and 'Wrap Cell Content'.

--Query13

--Find Maximum salaries paid to each employee type?

```

8
9
10
11 ✖ Select Max(Salary),Employee_Type
12 ✖ from anra.employee
13 ✖ group by Employee_Type

```

Result Grid | Filter Rows: Export:

	Max(Salary)	Employee_Type
▶	4000	Full Time
	3000	Part Time

TRIGGERS

--Trigger1

--Find Customer name and updated time on customers table ?

create table

UpdateCustomerDetails

(Customer_id int, First_Name varchar(20), update_time Datetime)

delimiter \\\

create trigger Update Customer Details_trigger

after update on customer

for each row

begin

declare new_date datetime;

```
set new_date=now();
```

```
insert into UpdateCustomerDetails(Customer_id,First_Name,update_time)  
values(old.Customer_ID,old.First_Name, new_date);
```

```
end \\  

```

```
--when customers details are updated the trigger is set  
update customer set Email_Address='naynaa@gmail.com'  
where Customer_ID=10000
```

```
--updates can be seen in the newly created table  
select * from UpdateCustomerDetails
```

--Trigger2

```
--Find the newly changed colour for the product?
```

Create table

AddedProductColour

(Product_id char(5), Colour varchar(20))

```
delimiter \\  

```

```
create trigger AddedProductColour_trigger
```

```
after update on anra.`product details`
```

```
for each row
```

```
begin
```

```
insert into AddedProductColour(Product_id, Colour )
```

```
values(old.Product_id,Colour);
```

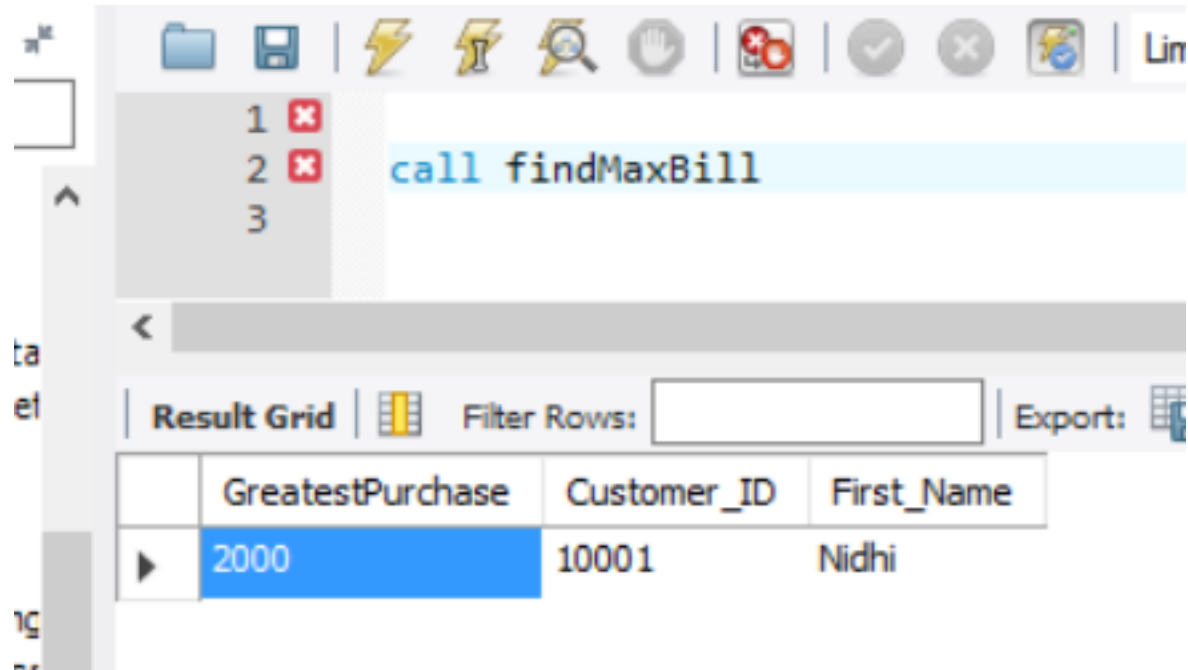
```
end \\  

```

--STORED PROCEDURES

--1-- Stored procedure to find customer details of highest Amount_Paid

call findMaxBill()



delimiter//

Create Procedure findMaxBill()

Begin

select Max(anra.bill.Amount_Paid) As GreatestPurchase,
anra.customer.Customer_ID,anra.customer.First_Name

from anra.bill

inner join anra.payment

on anra.payment.Payment_ID=anra.bill.Payment_ID

inner join anra.Customer

on anra.payment.Customer_ID=anra.customer.Customer_ID;

--VIEWS

--1 --

Student as customer views

```
create view StudentAsCustomer as ( select * from customer where Customer_Type = 'Student')
```

--2

--Product details with minimum defect% and high rating

```
create view LeastDefectHighRating as
(select product.Product_Name, min(reviews.`Defect%`), max(reviews.Quality_Rating)
from anra.reviews
inner join anra.product
on anra.reviews.Product_ID=anra.product.Product_ID)
```

--3

--Products and the colours available

```
create view ProductandAvailableColours as
(SELECT Product_Name, Colour
FROM anra.`product details`
INNER JOIN anra.product
ON anra.`product details`.Product_ID=anra.product.Product_ID order by colour)
```

--4

--Distinct employee departments whose salary is greater than 1200 limit to 4.

create view DistinctEmployeeDepartments as

(Select DISTINCT

anra.employee.Designation,anra.employee.Employee_Name,anra.employee.Department

From anra.employee

Where anra.employee.salary>1200 limit 4)

--5

--Create view TotalAmount as Total amount of revenue earned with respect to their purchasing modes.

create view as totalamount

(Select count(Payment_Mode) As Total_Cutomers,

anra.payment.Payment_Mode,Sum(anra.bill.Amount_Paid)

As Total_Amount

from anra.payment

inner join anra.bill

on anra.payment.Payment_ID=anra.bill.Payment_ID

group by Payment_Mode)

--6--Create view to know the employee designation and id and total number of customers monitored by each employee in descending order.

create view NumberOfCustomersMonitered as

**(Select count(anra.customer.Customer_ID) as Total_Customers,
anra.customer.Employee_ID,anra.employee.Designation**

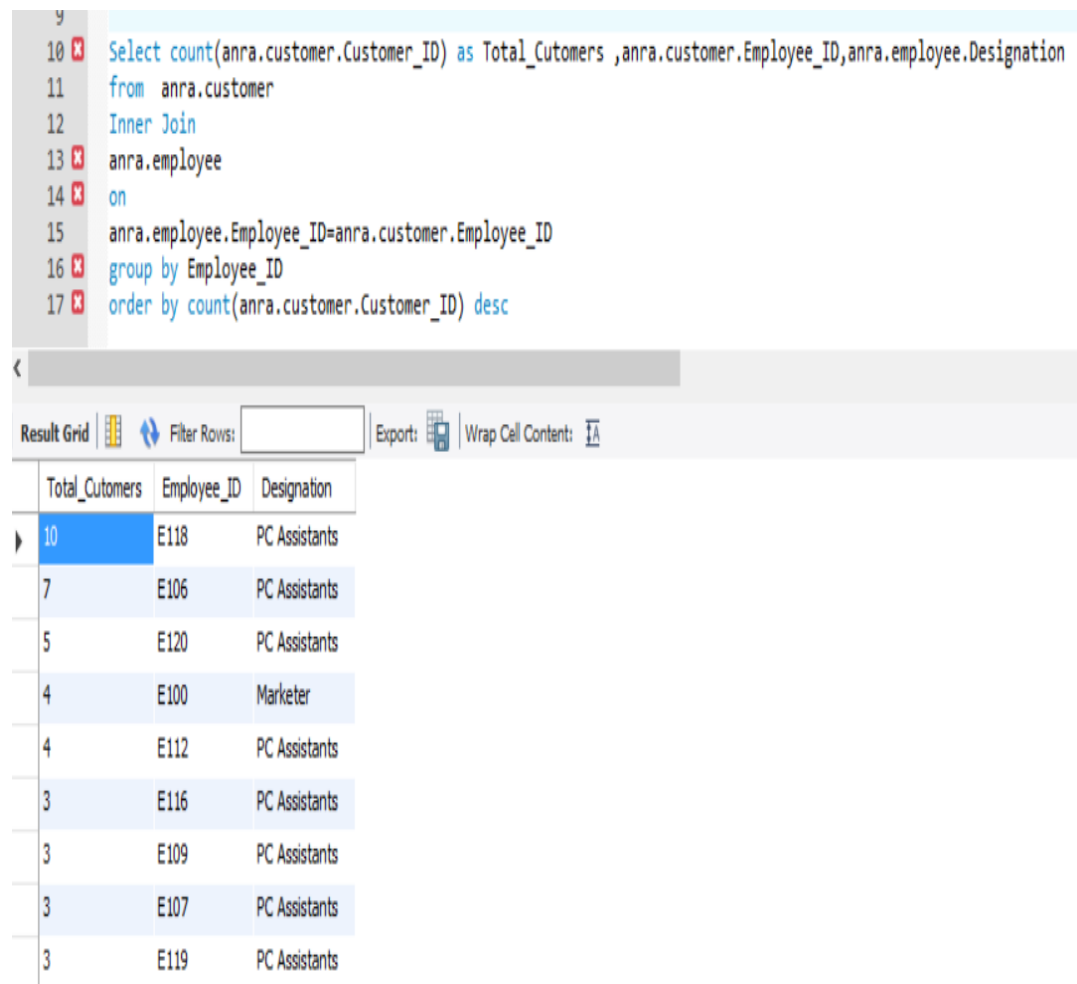
From anra.customer

Inner Join anra.employee

on anra.employee.Employee_ID=anra.customer.Employee_ID

group by Employee_ID

order by count(anra.customers.Customer_ID) desc)



```
9
10 Select count(anra.customer.Customer_ID) as Total_Cutomers ,anra.customer.Employee_ID,anra.employee.Designation
11 from anra.customer
12 Inner Join
13 anra.employee
14 on
15 anra.employee.Employee_ID=anra.customer.Employee_ID
16 group by Employee_ID
17 order by count(anra.customer.Customer_ID) desc
```

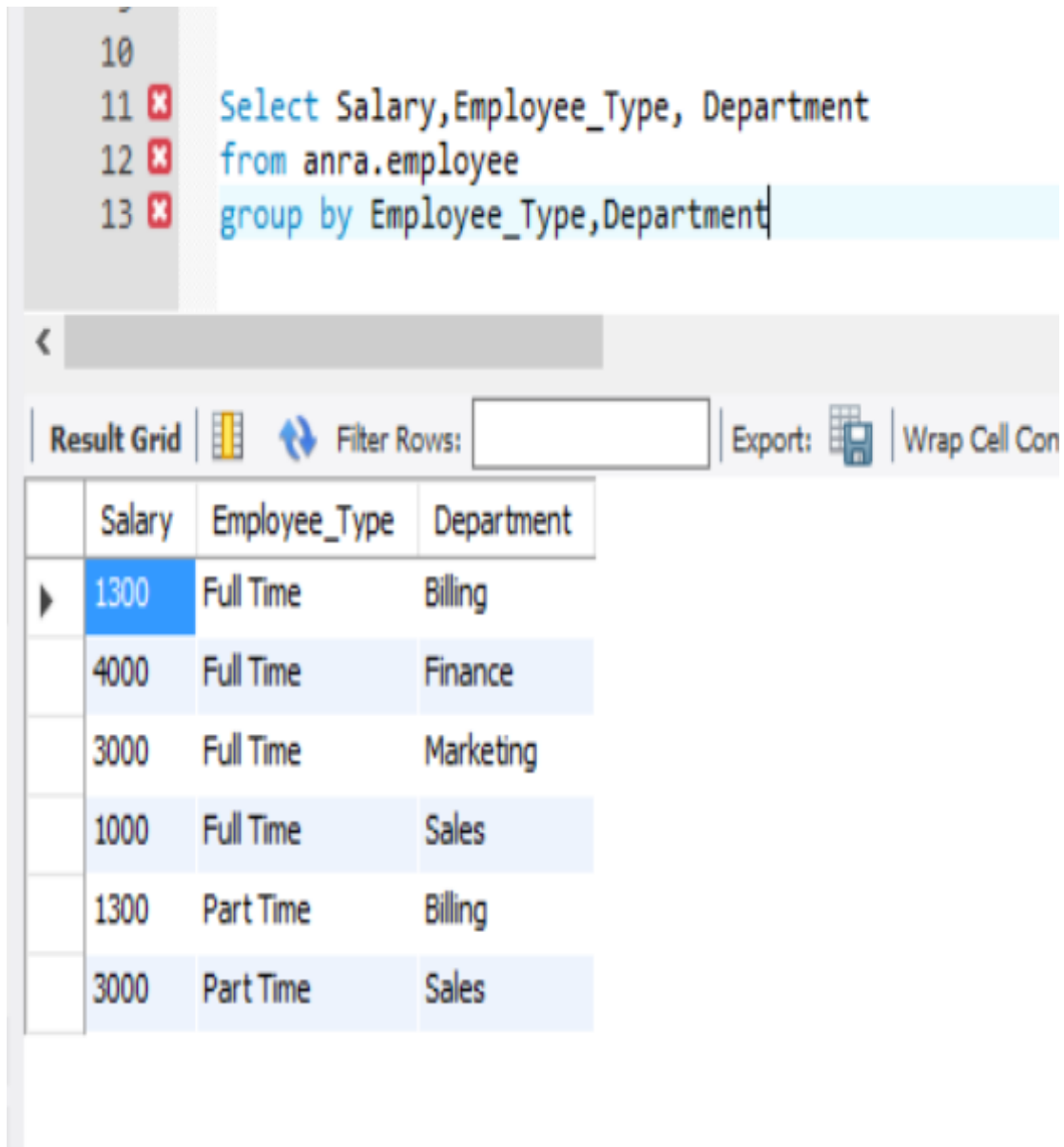
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Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Total_Cutomers	Employee_ID	Designation
▶	10	E118	PC Assistants
	7	E106	PC Assistants
	5	E120	PC Assistants
	4	E100	Marketer
	4	E112	PC Assistants
	3	E116	PC Assistants
	3	E109	PC Assistants
	3	E107	PC Assistants
	3	E119	PC Assistants

--7--View Salary of employee group by type and department.

```
create view SalaryGroupbyType as
(Select Salary, Employee_Type, Department
From anra.employee
Group by Employee_Type, Department)
```



```
10
11 Select Salary, Employee_Type, Department
12 from anra.employee
13 group by Employee_Type, Department
```

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

	Salary	Employee_Type	Department
▶	1300	Full Time	Billing
	4000	Full Time	Finance
	3000	Full Time	Marketing
	1000	Full Time	Sales
	1300	Part Time	Billing
	3000	Part Time	Sales

--8-- Find The quantity of products available whose status is in progress and shipment duration is immediate

create view OrderStatusandAvailableQuantity as

(SELECT anra.product.Product_Name,anra.product.Available_Number,`order
product`.Quantity,orders.Order_Date, orders.`Status`,orders.Shippent_Duration

from anra.orders

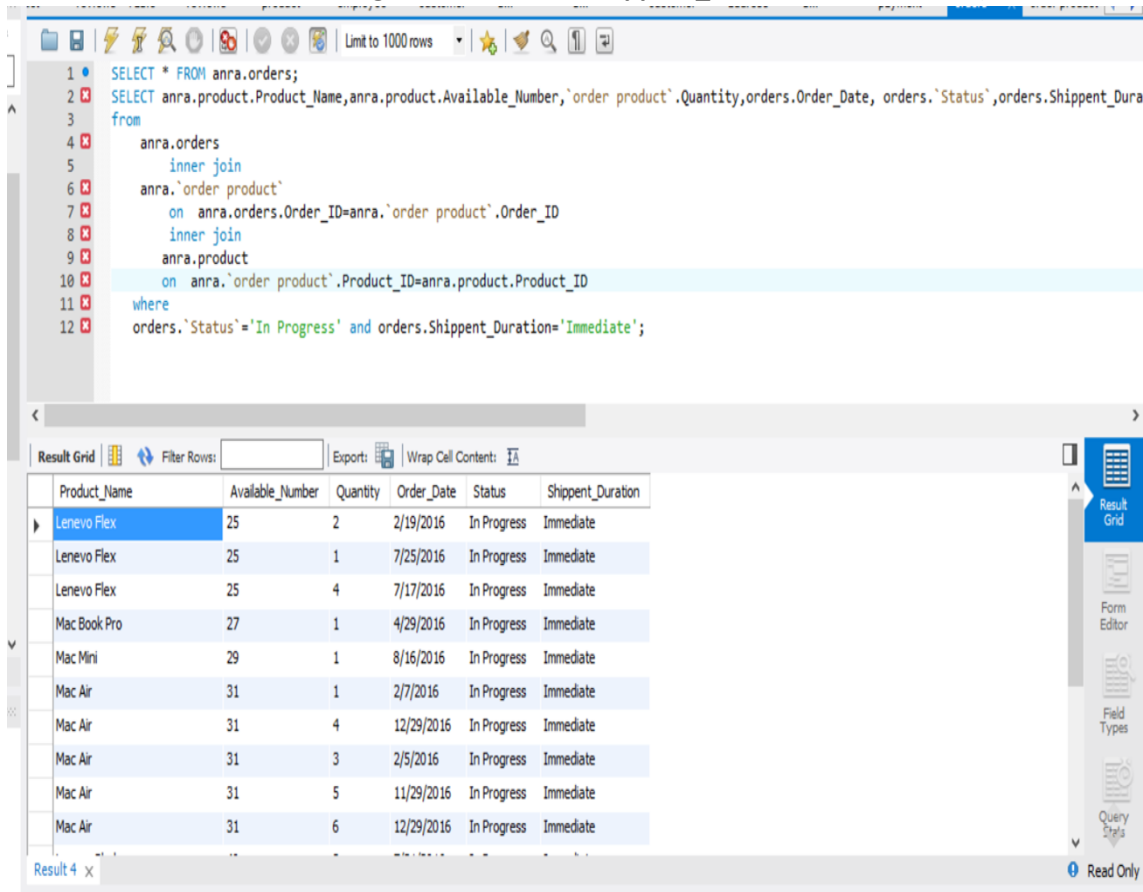
inner join anra.`order product`

on anra.orders.Order_ID=anra.`order product`.Order_ID

inner join anra.product

on anra.`order product`.Product_ID=anra.product.Product_ID

where orders.`Status`='In Progress' and orders.Shippent_Duration='Immediate')



The screenshot shows a database query editor with a SQL query and its results. The query is as follows:

```
1 SELECT * FROM anra.orders;  
2 SELECT anra.product.Product_Name,anra.product.Available_Number,`order  
3 product`.Quantity,orders.Order_Date, orders.`Status`,orders.Shippent_Dura  
4 from  
5 anra.orders  
6 inner join  
7 anra.`order product`  
8 on anra.orders.Order_ID=anra.`order product`.Order_ID  
9 inner join  
10 anra.product  
11 on anra.`order product`.Product_ID=anra.product.Product_ID  
12 where  
orders.`Status`='In Progress' and orders.Shippent_Duration='Immediate';
```

The results are displayed in a grid with the following columns: Product_Name, Available_Number, Quantity, Order_Date, Status, and Shippent_Duration. The data is as follows:

Product_Name	Available_Number	Quantity	Order_Date	Status	Shippent_Duration
Lenevo Flex	25	2	2/19/2016	In Progress	Immediate
Lenevo Flex	25	1	7/25/2016	In Progress	Immediate
Lenevo Flex	25	4	7/17/2016	In Progress	Immediate
Mac Book Pro	27	1	4/29/2016	In Progress	Immediate
Mac Mini	29	1	8/16/2016	In Progress	Immediate
Mac Air	31	1	2/7/2016	In Progress	Immediate
Mac Air	31	4	12/29/2016	In Progress	Immediate
Mac Air	31	3	2/5/2016	In Progress	Immediate
Mac Air	31	5	11/29/2016	In Progress	Immediate
Mac Air	31	6	12/29/2016	In Progress	Immediate