- **Database Management for Retail Application:-**

Reports generated doing the analysis will contain the following:

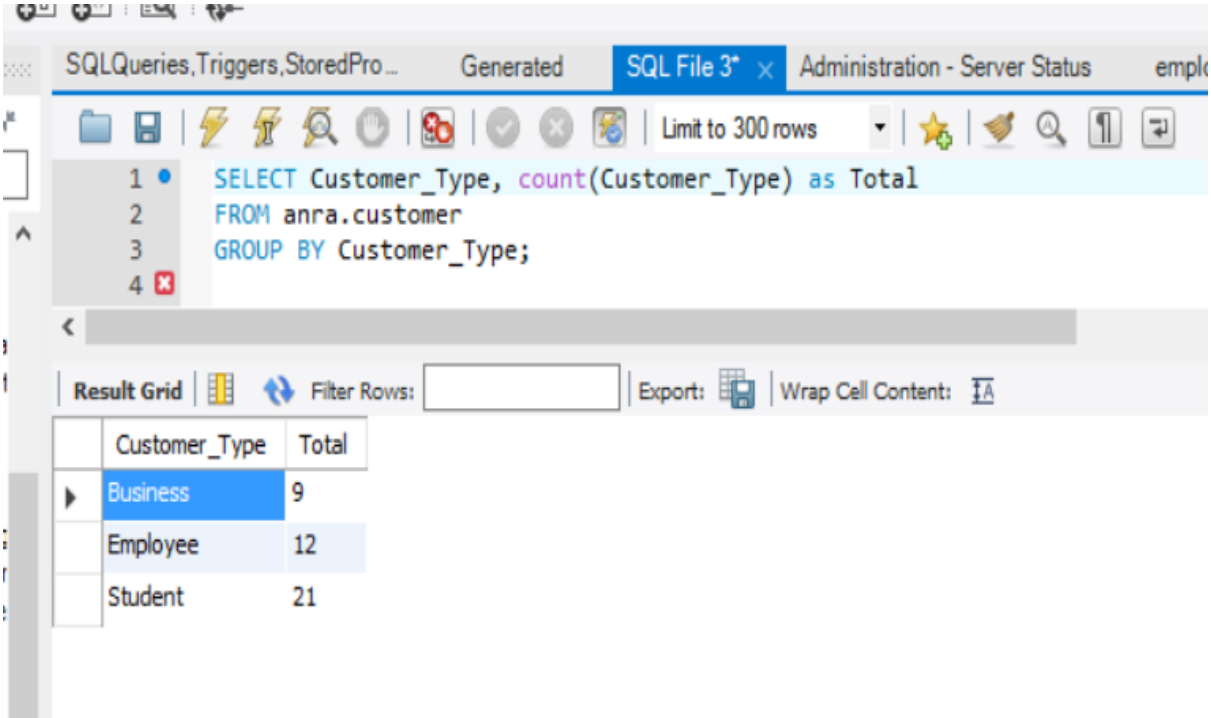
--QUERIES:-

--***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;



--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
```

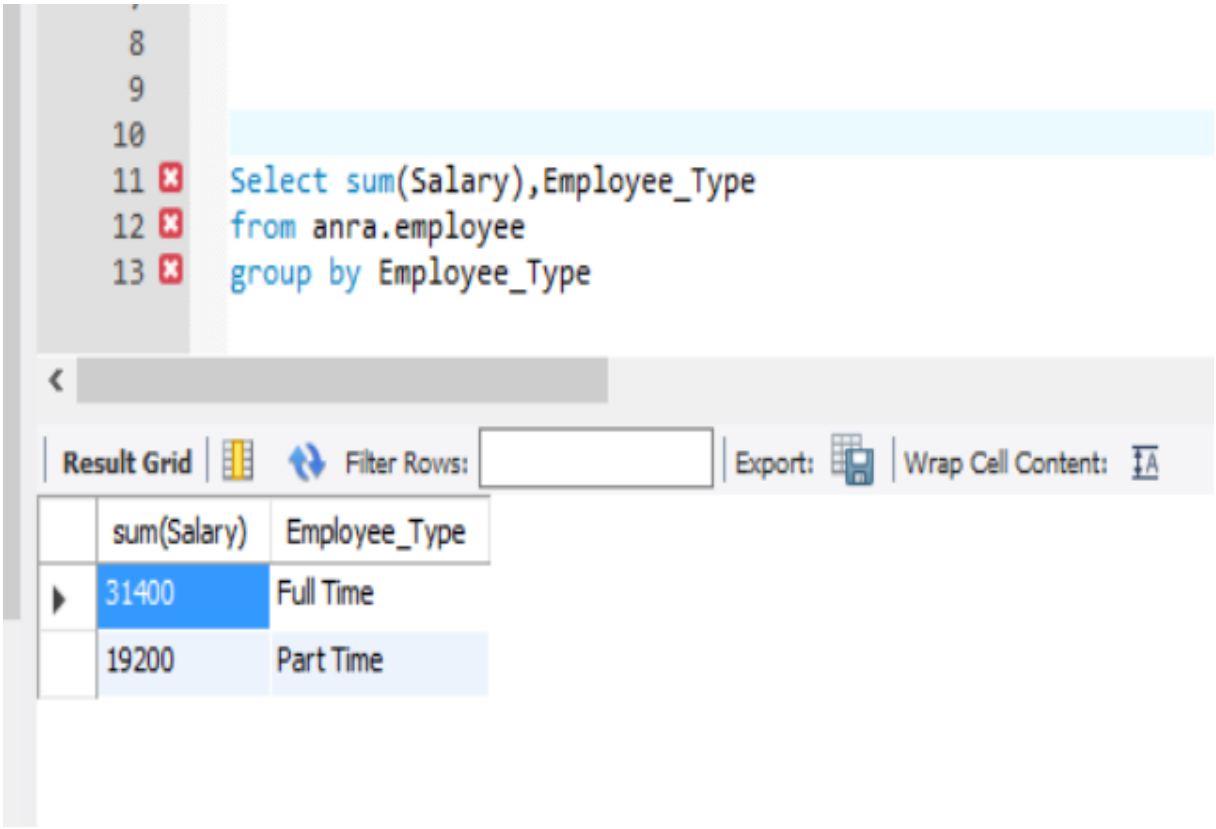
FROM anra.`product group`

INNER JOIN anra.product

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

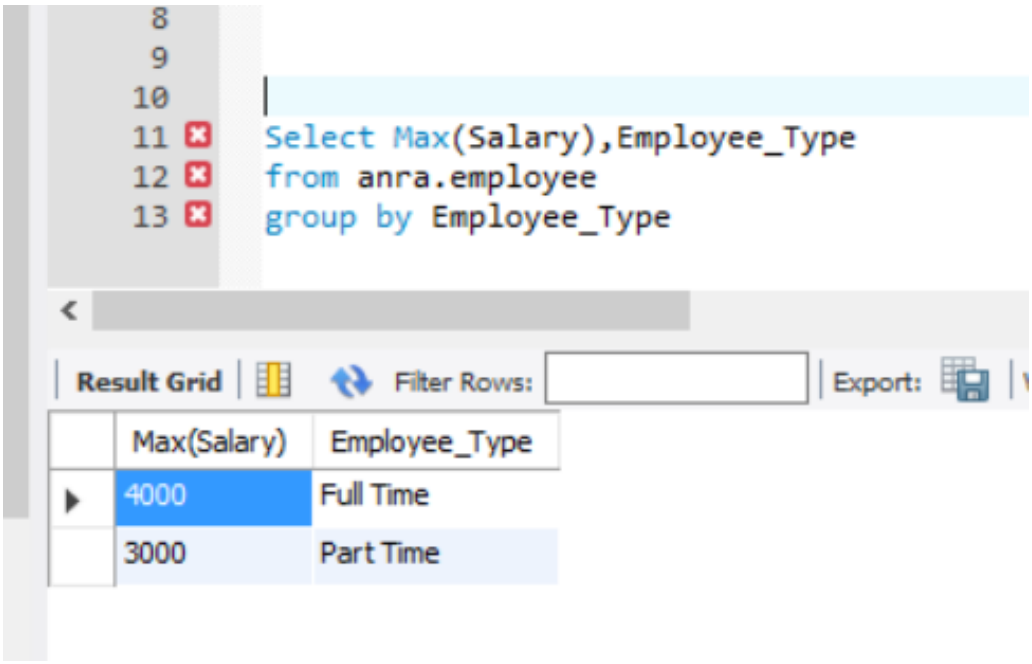
--Query12

--Find Total salaries payed to each employee type?



--Query13

--Find Maximum salaries payed to each employee type?



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

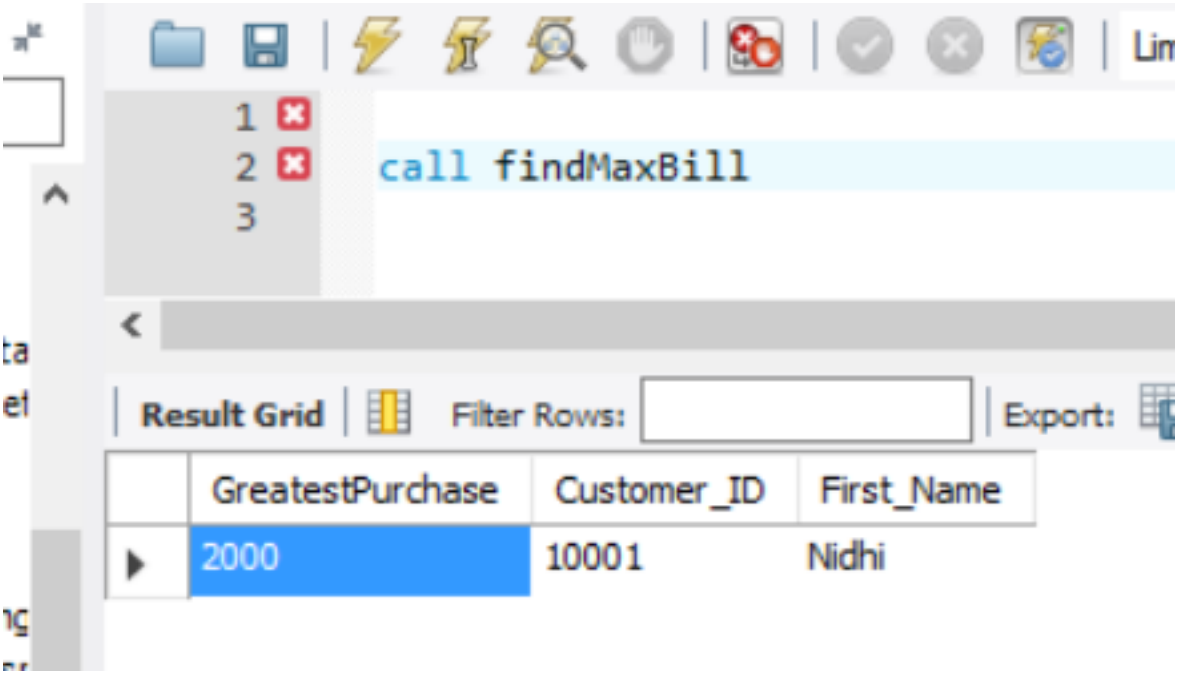
--Find the newly changed colour for the product?

```
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.Emploee_ID,anra.emploee.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
```

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

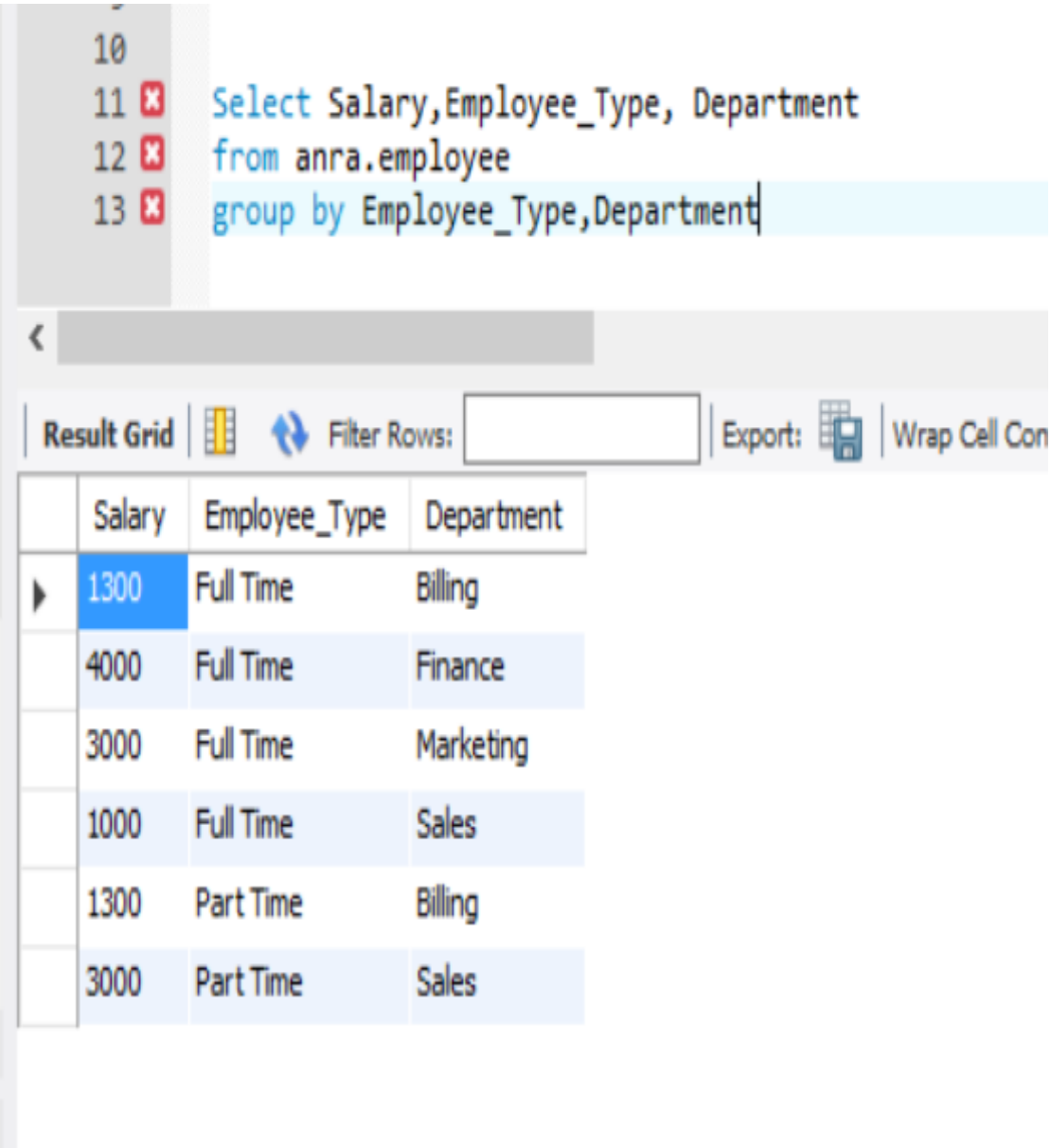
--7--View Salary of employee group by type and department.

create view SalaryGroupbyType as

(Select Salary, Employee_Type,Department

From anra.employee

Group by Employee_Type,Department)



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')