DBMS Project Group G3_3

: G3_3 SELECT Queries :

Q1) Most selling item in a category, in a particular month :

```
select count, month, item_code, itemname from (select itemname,
item_code, count(qty), category_id, EXTRACT(month FROM invoice_date)
as "month"
from product natural join p_invoicedetails natural join p_invoice
group by category_id, item_code, EXTRACT(month FROM invoice_date),
itemname
order by category_id, EXTRACT(month FROM invoice_date)) as X
natural join
(select max (count), month from (select item_code, count(qty),
category_id, EXTRACT(month FROM invoice_date) as "month"
from product natural join p_invoicedetails natural join p_invoice
group by category_id, item_code, EXTRACT(month FROM invoice_date)
order by category_id, EXTRACT(month FROM invoice_date)) as B group by
month) as Y
where count = max
order by month ;
```

Q2)Admin wants to know department wise no. of employees :

```
SELECT count(eno) as "num of employee " , dno FROM employee NATURAL
JOIN department GROUP BY dno;
```

Q3)Check-out details (total price and quantity) of a cart for a particular user :

```
select sum(particular_qty*unit_price) as "total_price",
sum(particular_qty) as "Quantity",user_id
from p_cart natural join product natural join user_d
group by user_id;
```

Q4)Top 10 buyers in term of invoice :

```
select count(invoice_num), user_id, f_name , l_name from p_invoice
natural join user_d
group by user_id order by count(invoice_num) desc limit 10 ;
```

Q5)Most selling item :

```
select sum(qty), item_code from product natural join p_invoicedetails
group by item_code order by sum(qty) desc limit 1;
```

Q6)Most liked restaurants :

```
select rest_id, count(food_id),res_name from food_invoicedetails JOIN
restaurant ON res_id = rest_id
group by rest_id,res_name order by count desc limit 1;
```

Q7)Most demanded suppliers category wise :

```
select category_id,supplierid, sum from (select category_id, max(sum)
from (select category_id,supplierid ,sum(quantity) from  product
natural join p_supplied
group by category_id,supplierid order by category_id ,sum(quantity)
desc)as u group by category_id) as c
natural join
(select category_id,supplierid ,sum(quantity) from  product natural
join p_supplied
group by category_id,supplierid order by category_id ,sum(quantity)
desc) as b where b.sum=c.max;
```

Q8) Total sold items in a particular month :

```
select EXTRACT(month FROM invoice_date) as "month", sum(qty) as
"total_sale"
from (product natural join p_invoicedetails) natural join p_invoice
group by EXTRACT(month FROM invoice_date)
order by EXTRACT(month FROM invoice_date), sum(qty) desc;
```

Q9)Most preferred food by user :

```
select food_item, count(qty) from food_item natural join
food_invoicedetails
group by food_id, food_item
order by count(qty) desc
limit 1;
```

Q10) Admin wise employee's total salary.

```
select admin_id,count(eno),sum(salary) from employee
group by admin_id order by admin_id;
```

Q11) In which city did the user order the most?

```
select user_city,count(order_id) from user_d natural join
order_u
```

```
group by user_city
order by count(order_id) desc limit 1;
```

Q12) Total Revenue generated on sale of product.

```
select sum(qty*unit_price) as revenue from p_invoice natural join
p_invoicedetails natural join product;
```

Q13) Current popular category .

```
select category_id,sum(unit_on_order) from product  group by
category_id order by sum desc limit 1;
```

Q14) The city in which the maximum revenue:

```
select user_city,sum(qty*unit_price) from  user_d natural join
p_invoice natural join p_invoicedetails natural join product
group by user_city
order by sum desc limit 1;
```

Q15) Typewise most popular food products :

```
select food_type,food_item,total_qty from (select
fp.food_item,food_type, total_qty from food_item as fp join
(select COUNT(qty) as "total_qty",food_id from (select * from
food_invoicedetails natural join food_item)
as r group by food_type,food_id)as r1 on fp.food_id = r1.food_id
order by food_type,total_qty desc) as a
NATURAL join
(select max(total_qty),food_type from
(select fp.food_item,food_type, total_qty from food_item as fp join
(select COUNT(qty) as "total_qty",food_id from (select * from
food_invoicedetails natural join food_item)
as r group by food_type,food_id)as r1 on fp.food_id = r1.food_id
order by food_type,total_qty desc) as b group by food_type) as e
WHERE max = total_qty;
```

Q16) Most purchasing users in terms of total profit.

```
select sum(qty*unit_price*discount/100) as "purchased",user_id from
product natural join
(select * from p_invoicedetails as ind natural join p_invoice as iv)
as r1 group by user_id order by purchased DESC  limit 1
```

Q17) Items in each category whose stock is less than average.

```
select item_code,category_id,unit_stock from (select * from product )
as a
natural join
(select avg(unit_stock),category_id from product group by category_id
order by category_id) as b
WHERE unit_stock < avg
order by category_id;
```

Q18) Profit earned from each category.

```
select sum(qty*unit_price*discount/100) as revenue,category_id from
p_invoice natural join p_invoicedetails
natural join product group by category_id order by category_id;
```

Q19) Profit generated in any particular month.

```
select sum(qty*unit_price*discount/100) as revenue,EXTRACT(month from
invoice_date) as month from p_invoice natural join p_invoicedetails
natural join product group by EXTRACT(month from invoice_date) order
by EXTRACT(month from invoice_date);
```

Q20) Reorder level of any particular category.

```
select category_id,avg(reorder_level) from product group by
category_id order by category_id;
```

Q21) Find which restaurant supplies the most in terms of total quantity.

```
SELECT r.res_id, r.res_name, SUM(f.qty) AS total_quantity
FROM restaurant  as r
JOIN food_invoicedetails as f ON r.res_id = f.rest_id
GROUP BY r.res_id, r.res_name
ORDER BY total_quantity DESC LIMIT 1;
```