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I have done complete work (SQL QUESRIES + FUNCTIONAL FRONT-END OF ALL OF THEM).

### SQL QUERIES:

**\*I have also *optimized* most of the queries.**

#### #Query 1

```
SELECT pet_type, COUNT(pet_type) AS total_sales
FROM (SELECT * FROM sale_main LEFT JOIN pets_main ON sale_main.product_id = pets_main.pet_id) as JT
GROUP BY pet_type
ORDER BY COUNT(pet_type) DESC
LIMIT 1;
```

#### #Query 2

```
SELECT stp.supplier_id, COUNT(stp.supplier_id) AS total_sales
FROM supplier_to_prodcut as stp
GROUP BY stp.supplier_id
ORDER BY COUNT(stp.supplier_id) DESC
LIMIT 1;
```

#### #Query 3

```
SELECT SUM(pet_price) as Revenue, sale_date
FROM (SELECT * FROM sale_main LEFT JOIN pets_main ON sale_main.product_id = pets_main.pet_id) as
RESD
WHERE sale_date = 20181111;
```

#### #Query 4

```
SELECT cm.customer_id, cm.customer_name, cm.customer_city, cm.customer_street,
RESD.total_amount_of_purchases FROM
customer_main as cm
RIGHT JOIN
(SELECT customer_id as customer, SUM(pet_price) as total_amount_of_purchases
FROM sale_main as sm LEFT JOIN pets_main as pm
ON sm.product_id = pm.pet_id
GROUP BY customer_id
ORDER BY SUM(pet_price) DESC
LIMIT 1) as RESD
ON cm.customer_id = RESD.customer
```

#### #Query 5

```
SELECT fm.food_name as leastEatenFoodName, (fm.food_id) as leastEatenFoodID
FROM food_main as fm LEFT JOIN pet_to_food as ptf
ON fm.food_id = ptf.food_id
GROUP BY fm.food_id
ORDER BY COUNT(fm.food_id)
LIMIT 1
```

#### **#Query 6**

```
SELECT RESD.customer_id, RESD.sale_id, RESD.pet_id, RESD.pet_name, RESD.pet_type, RESD.pet_price,
RESD.sale_date, RESD.employee_id
FROM (SELECT * FROM sale_main as sm
LEFT JOIN pets_main as pm ON sm.product_id = pm.pet_id) as RESD
WHERE RESD.customer_id = 1 # VAR
```

#### **#Query 7**

```
SELECT pet_details.PID as ID, pet_details.PN as NAME, pet_details.PT as Type, pet_details.PB as Breed,
pet_details.PG as Gender, pet_details.PSize as Size, pet_details.PP as Price
FROM sale_main as sm LEFT JOIN
(SELECT pm.pet_id as PID, pm.pet_name as PN, pm.pet_type as PT, ps.pet_breed as PB, ps.pet_gender as PG,
ps.pet_size as PSize, pm.pet_price as PP
FROM pets_main as pm LEFT JOIN pets_specs as ps ON pm.pet_id = ps.pet_id) as pet_details
ON sm.product_id = pet_details.PID
WHERE sm.sale_id = 2 # VAR
```

#### **#Query 8a**

```
SELECT COUNT(product_id) as TOTAL_SALES, supplier_id FROM supplier_to_prodcut
WHERE supplier_id = 1
ORDER BY COUNT(product_id)
```

#### **#Query 8b**

```
SELECT stp.supplier_id as SUPPLIER, pm.pet_name as NAME, pm.pet_type TYPE FROM
(supplier_to_prodcut as stp LEFT JOIN pets_main as pm ON stp.product_id = pm.pet_id)
WHERE stp.supplier_id = 1 #VAR
```

#### **#Query 9**

```
SELECT pet_name FROM pets_main
WHERE pet_price > 1 AND pet_price < 100
```

#### **#Query 10a**

```
SELECT COUNT(RESD.PET)
FROM (SELECT ptf.pet_id as PET, ptf.food_id as FOOD FROM pet_to_food as ptf WHERE food_id = 2) as
RESD
```

#### **#Query 10b**

```
SELECT pet_details.PID, pet_details.PT, pet_details.PB, pet_details.PG, pet_details.PSize, pet_details.PP FROM
pet_to_food as gptf LEFT JOIN
(SELECT pm.pet_id as PID, pm.pet_name as PN, pm.pet_type as PT, ps.pet_breed as PB, ps.pet_gender as PG,
ps.pet_size as PSize, pm.pet_price as PP
FROM pets_main as pm LEFT JOIN pets_specs as ps ON pm.pet_id = ps.pet_id) as pet_details ON gptf.pet_id =
pet_details.PID
WHERE gptf.food_id = 2 # VAR
```

Screen-shots of all ten queries' functional front-end:  
Query1:

Query1 => Maximum Sold Pet

Query2 => Supplier with Max sales

Query3 => Revenue of a particular day

Query4 => Customer with max amount of purchases

Query5 => Hardly Eaten Food

Query6 => Order History of a customer

Query7 => Detail of sold pet in a particular order

Query8a => Number of Sales by particular supplier

Query8b => names of pets sold by particular supplier

Query9 => Pets withing a range of price

Query10a => number who eat a particular food

Query10b => details of pets who eat a particular food

Tables

pet_type	total_sales
cat	3

Query2:

Query1 => Maximum Sold Pet

Query2 => Supplier with Max sales

Query3 => Revenue of a particular day

Query4 => Customer with max amount of purchases

Query5 => Hardly Eaten Food

Query6 => Order History of a customer

Query7 => Detail of sold pet in a particular order

Query8a => Number of Sales by particular supplier

Query8b => names of pets sold by particular supplier

Query9 => Pets withing a range of price

Query10a => number who eat a particular food

Query10b => details of pets who eat a particular food

Tables

supplier_id	total_sales
1	3

Query3:

Query1 => Maximum Sold Pet

Query2 => Supplier with Max sales

Query3 => Revenue of a particular day

Query4 => Customer with max amount of purchases

Query5 => Hardly Eaten Food

Query6 => Order History of a customer

Query7 => Detail of sold pet in a particular order

Query8a => Number of Sales by particular supplier

Query8b => names of pets sold by particular supplier

Query9 => Pets withing a range of price

Query10a => number who eat a particular food

Query10b => details of pets who eat a particular food

Tables

Revenue	sale date
11	2018-11-10T19:00:00.000Z

Query1 => Maximum Sold Pet

Query2 => Supplier with Max sales

Query3 => Revenue of a particular day

Query4 => Customer with max amount of purchases

Query5 => Hardly Eaten Food

Query6 => Order History of a customer

Query7 => Detail of sold pet in a particular order

Query8a => Number of Sales by particular supplier

Query8b => names of pets sold by particular supplier

Query9 => Pets withing a range of price

Query10a => number who eat a particular food

Query10b => details of pets who eat a particular food

Tables

date (format: 20181231 (Yr:4 Dg))

Submit

Query4:

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

customer_id	customer_name	customer_city	customer_street	total_amount_of_purchases
2	Jessa	Dholakpur	LaddoWali	10

Query5:

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

leastEatenFoodName	leastEatenFoodID
JunkFood	6

Query6:

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Customer IDFormat: 11

Submit

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

customer_id	sale_id	pet_id	pet_name	pet_type	pet_price	sale_date	employee_id
1	1	1	BigCat	cat	1	2018-11-20T19:00:00.000Z	1
1	2	2	SmallCat	cat	2	2018-11-10T19:00:00.000Z	1
1	4	3	MediumCat	cat	3	2018-11-10T19:00:00.000Z	2

Query7:

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

Sale (OfFormat: 1)

Submit

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

ID	NAME	Type	Breed	Gender	Size	Price
2	SmallCat	cat	German	M	5	2

Query8:

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

Create (OfFormat: 1)

Submit

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

SUPPLIER	NAME	TYPE
1	BigCat	cat
1	SmallCat	cat
1	MediumCat	cat

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

TOTAL_SALES	supplier_id
3	1

Query9:

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

Price Range (Format: 10-50)

Submit

Query1 ==> Maximum Sold Pet

Query2 ==> Supplier with Max sales

Query3 ==> Revenue of a particular day

Query4 ==> Customer with max amount of purchases

Query5 ==> Hardly Eaten Food

Query6 ==> Order History of a customer

Query7 ==> Detail of sold pet in a particular order

Query8a ==> Number of Sales by particular supplier

Query8b ==> names of pets sold by particular supplier

Query9 ==> Pets withing a range of price

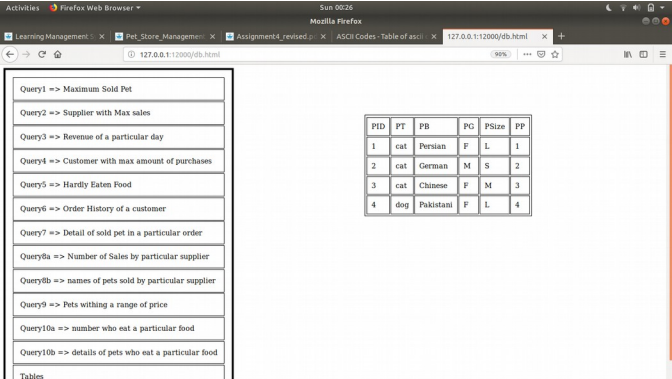
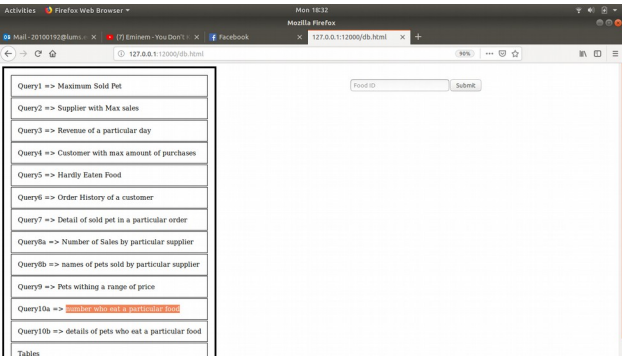
Query10a ==> number who eat a particular food

Query10b ==> details of pets who eat a particular food

Tables

pet_name
SmallCat
MediumCat
BigDog
SmallDog
MediumDog

Query10:



All Done!

Note: Front-end may not be beautiful but it is fully functional and most of the queries are *optimized*.