SQL CAPSTONE PROJECT

BY ABIMBOLA OLASIJI
abimbolasiji@gmail.com

SECTION A - PROFIT ANALYSIS

```sql
-----2. Compare the total profit between these two territories in order for the territory
---manager, Mr. Stone to make a strategic decision that will aid profit maximization in 2020.

select territories, SUM (profit)
from csv_table
GROUP BY territories
ORDER BY SUM(profit )
```

Data output

	territories character varying (50)	sum bigint
1	Anglophone	42389260
2	Francophone	63198160

Total rows: 2 of 2   Query complete 00:00:00.522

File ∨   Object ∨   Tools ∨   Help ∨

Browser

public.languag...   DB_csv/postgr...   DB_csv/postgr...   DB_csv/postgres@PostgreSQL 14*

DB_csv/postgres@PostgreSQL 14

sales_id
sales_rep
emails
brands
plant_cost
unit_price
quantity
product_cost
profit
countries
region
months
years
territories

Query   Query History

Scratch Pad   ✕

```
1   ---3. What country generated the highest profit in 2019
2
3   SELECT countries, SUM(profit)
4   FROM csv_table
5   WHERE  years = 2019
6   GROUP BY Countries
7   ORDER BY SUM(profit) DESC
8   LIMIT 1;
```

Data output   Messages   Notifications

	countries character varying (50) 🔒	sum bigint 🔒
1	Ghana	7144070

> Constraints
> Indexes
> RLS Policies
> Rules
> Triggers
> Trigger Functions
> Types
∨ Views (1)
  ∨ language_territories
    > Columns
    > Rules
    > Triggers
> Subscriptions

Total rows: 1 of 1   Query complete 00:00:00.146

Activate Windows
Go to Settings to activate Windows.

Ln 8, Col 9

```sql
---4. Help him find the year with the highest profit.

SELECT years, SUM(profit)
FROM csv_table
GROUP BY years
ORDER BY SUM(profit) DESC
LIMIT 1;
```

years integer	sum bigint
2017	38503320

```
---5. Which month in the three years was the least profit generated?


SELECT months,years, SUM(profit) AS least_profit
FROM csv_table
GROUP BY months, years
ORDER BY least_profit ASC
LIMIT 1
```

	months character varying (50)	years integer	least_profit bigint
1	February	2019	1366880

Total rows: 1 of 1   Query complete 00:00:00.108

pgAdmin   File ⌄   Object ⌄   Tools ⌄   Help ⌄

Browser

DB_csv/postgres@PostgreSQL 14

```
1   ---6. What was the minimum profit in the month of December 2018?
2
3   SELECT years, countries, MIN(profit) AS minimum_profit
4   FROM csv_table
5   WHERE months = 'December' AND years = 2018
6   GROUP BY years, countries
7   ORDER BY MIN(profit) ASC LIMIT 1;
8
```

Query   Query History

Scratch Pad ✕

Data output   Messages   Notifications

	years integer	countries character varying (50)	minimum_profit integer
1	2018	Senegal	38150

Browser tree:
- Operators
- Procedures
- 1.3 Sequences
- Tables (1)
  - csv_table
    - Columns (14)
      - sales_id
      - sales_rep
      - emails
      - brands
      - plant_cost
      - unit_price
      - quantity
      - product_cost
      - profit
      - countries
      - region
      - months
      - years
      - territories
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers
- Trigger Functions
- Types

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Total rows: 1 of 1   Query complete 00:00:00.228   Ln 7, Col 33

pgAdmin   File ˅   Object ˅   Tools ˅   Help ˅

Browser

stgr...   DB_csv/postgr...   DB_csv/postgr...   DB_csv/postgr...   DB_csv/postgres@PostgreSQL 14*

DB_csv/postgres@PostgreSQL 14

Query   Query History

Scratch Pad ✕

```
1    ---7. Compare the profit for each of the months in 2019
2
3    SELECT DISTINCT months, SUM (profit) AS total_profit
4    FROM csv_table
5    WHERE years = 2019
6    GROUP BY months
7    ORDER BY SUM(profit)
```

> Operators
> () Procedures
> 1..3 Sequences
˅ Tables (1)
  ˅ csv_table
    ˅ Columns (14)
        sales_id
        sales_rep
        emails
        brands
        plant_cost
        unit_price
        quantity
        product_cost
        profit
        countries
        region
        months
        years
        territories
    > Constraints
    > Indexes
    > RLS Policies
    > Rules
    > Triggers
> Trigger Functions
> Types

Data output   Messages   Notifications

	months character varying (50)	total_profit bigint
1	February	1366880
2	September	1892600
3	December	2048780
4	October	2220870
5	March	2530620
6	May	2573040
7	June	2669080
8	November	2675610
9	April	2851470
10	July	2945340

Total rows: 12 of 12   Query complete 00:00:00.169   Ln 5, Col 19

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Browser

DB_csv/postgres@PostgreSQL 14

Query   Query History

```
1   ----8. Which particular brand generated the highest profit in Senegal?
2
3   SELECT brands, SUM(profit)
4   FROM csv_table
5   WHERE countries = 'Senegal'
6   GROUP BY  brands
7   ORDER BY SUM(profit) DESC
8   LIMIT 1
```

Data output   Messages   Notifications

	brands character varying (50)	sum bigint
1	castle lite	7012980

Total rows: 1 of 1   Query complete 00:00:00.121   Ln 8, Col 8

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SECTION B- BRAND ANALYSIS

Servers (1)
  PostgreSQL 14
    Databases (3)
      DB_csv
      DVD rental
      postgres
    Login/Group Roles
    Tablespaces

DB_csv/postgres@PostgreSQL 14

No limit

Query   Query History

```
1   ---2. Find out the top two choice of consumer brands in Ghana
2
3
4   SELECT brands, SUM (quantity)as quantity
5   FROM csv_table
6   WHERE countries = 'Ghana'
7   GROUP BY brands
8   ORDER BY SUM (quantity) DESC
9   LIMIT 2
10
11
```

Data output   Messages   Notifications

	brands character varying (50)	quantity bigint
1	eagle lager	25829
2	castle lite	25806

Query | Query History

Scratch Pad ✕

```sql
1  ---3. Find out the details of beers consumed in the past three years in the most oil reached country in
2  ---West Africa.
3  --Most Oil reached country is Nigeria
4
5
6  SELECT *
7  FROM csv_table
8  WHERE countries = 'Nigeria' AND brands NOT LIKE '%malt';
```

Data output | Messages | Notifications

	emails character varying (50)	brands character varying (50)	plant_cost integer	unit_price integer	quantity integer	product_cost integer	profit integer	countries character varying (50)	region character varying (50)	months character varying (50)	years integer	territories character varying
1	gillhell@uk.com	budweiser	250	500	815	407500	203750	Nigeria	west	February	2018	Anglophone
2	jone.ai@yahoo.com	hero	150	200	902	180400	45100	Nigeria	northcentral	December	2019	Anglophone
3	parentty@uk.com	castle lite	180	450	837	376650	225990	Nigeria	northeast	May	2017	Anglophone
4	smithMan@yahoo.com	trophy	150	200	860	172000	43000	Nigeria	northwest	October	2018	Anglophone
5	morganny@gmail.com	eagle lager	170	250	826	206500	66080	Nigeria	west	August	2017	Anglophone
6	thomp@uk.com	budweiser	250	500	821	410500	205250	Nigeria	Southeast	January	2017	Anglophone
7	jard@gmail.com	hero	150	200	952	190400	47600	Nigeria	northeast	November	2017	Anglophone
8	parentty@uk.com	castle lite	180	450	878	395100	237060	Nigeria	northwest	April	2019	Anglophone

Total rows: 150 of 150 | Query complete 00:00:00.679

Ln 7, Col 6

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Dashboard   Properties   SQL   Statistics   Dependencies   Dependents   🛢 DB_csv/postgr...   🛢 DB_csv/postgr...   🛢 DB_csv/postgr...

Servers (1)
    PostgreSQL 14
        Databases (3)
            DB_csv
            DVD rental
            postgres
        Login/Group Ro
        Tablespaces

🔗 DB_csv/postgres@PostgreSQL 14   ▾   🛢

Query   Query History

```
1   ---4. Favorites malt brand in Anglophone region between 2018 and 2019
2
3   SELECT brands, territories, SUM(quantity) as quantity
4   FROM csv_table
5   WHERE brands LIKE '%malt'AND years IN ('2018', '2019') and territories = 'Anglophone'
6   GROUP BY brands, territories
7   ORDER BY SUM(quantity) DESC
8   LIMIT 1
```

Data output   Messages   Notifications

	brands character varying (50) 🔒	territories character varying (50) 🔒	quantity bigint 🔒
1	grand malt	Anglophone	33221

Total rows: 1 of 1   Query complete 00:00:00.222

pgAdmin   File ∨   Object ∨   Tools ∨   Help ∨

Properties   SQL   Statistics   Dependencies   Dependents   🛢 DB_csv/postgr...   🛢 DB_csv/postgr...   🛢 DB_csv/postgr...   🛢 DB_csv/postgr

```
DB_csv/postgres@PostgreSQL 14
```

No limit

Query   Query History

```
1   --- 5. Which brands sold the highest in 2019 in Nigeria?
2   ---- HIGHEST SOLD BRAND IN 2019 IN NIGERIA-- HERO
3
4   SELECT brands, SUM (quantity)as quantity
5   FROM csv_table
6   WHERE countries = 'Nigeria' AND years = 2019
7   GROUP BY brands
8   ORDER BY SUM(quantity) DESC
9   LIMIT 3
```

Data output   Messages   Notifications

	brands character varying (50) 🔒	quantity 🔒 bigint
1	hero	9622
2	eagle lager	8401
3	beta malt	8389

Servers (1)
  PostgreSQL 14
    Databases (3)
      > DB_csv
      > DVD rental
      > postgres
    > Login/Group Ro
    > Tablespaces

Total rows: 3 of 3   Query complete 00:00:03.563

pgAdmin 4

pgAdmin   File ⌄   Object ⌄   Tools ⌄   Help ⌄

DB_csv/postgr...   DB_csv/postgres@PostgreSQL 14*   public.csv_tabl...   DB_csv/postgr...

DB_csv/postgres@PostgreSQL 14

No limit

Query   Query History

```
1   --- 6. Favorites brand in South_South region in Nigeria
2
3   select  brands, SUM (quantity)
4   FROM csv_table
5   where countries = 'Nigeria' and region ='southsouth'
6   GROUP BY  brands
7   ORDER BY SUM (quantity)DESC
8   LIMIT 1
9
```

Data output   Messages   Notifications

	brands character varying (50) 🔒	sum bigint 🔒
1	eagle lager	4551

pgAdmin   File ⌄   Object ⌄   Tools ⌄   Help ⌄

DB_csv/postgr...   DB_csv/postgr...   DB_csv/postgr...   DB_csv/postgr...   DB_csv/postgr...   public.csv_tabl...   DB_csv/postg

DB_csv/postgres@PostgreSQL 14

No limit

Query   Query History

```
1   ---7. Beer consumption in Nigeria
2
3
4   SELECT SUM(quantity) as beer_consumption
5   FROM csv_table
6   WHERE countries = 'Nigeria' AND brands NOT LIKE '%malt'
```

Data output   Messages   Notifications

	beer_consumption 🔒
	bigint
1	129260

Browser

Dashboard   Properties   SQL   Statistics   Dependencies   Dependents   ⬛ DB_csv/postgres@PostgreSQL 14*

- Servers (1)
  - PostgreSQL 14
    - Databases (3)
      - DB_csv
        - Casts
        - Catalogs
        - Event Triggers
        - Extensions
        - Foreign Data Wrappers
        - Languages
        - Publications
        - Schemas
        - Subscriptions
      - DVD rental
      - postgres
  - Login/Group Roles
  - Tablespaces

⬛ DB_csv/postgres@PostgreSQL 14   ⬛

No limit

Query   Query History

```
1   ---8. Level of consumption of Budweiser in the regions in Nigeria
2
3   SELECT region, SUM (quantity) as Budweiser_consumption
4   FROM csv_table
5   WHERE brands = 'budweiser' AND countries = 'Nigeria'
6   GROUP BY region
7   ORDER BY SUM (quantity) DESC
```

Data output   Messages   Notifications

	region character varying (50) 🔒	budweiser_consumption 🔒 bigint
1	west	4620
2	northcentral	4498
3	southsouth	4328
4	northeast	4320
5	northwest	4274
6	Southeast	4113

Browser

Servers (1)
  PostgreSQL 14
    Databases (3)
      DB_csv
        > Casts
        > Catalogs
        > Event Triggers
        > Extensions
        > Foreign Data Wrappers
        > Languages
        > Publications
        > Schemas
        > Subscriptions
      > DVD rental
      > postgres
    > Login/Group Roles
    > Tablespaces

Dashboard   Properties   SQL   Statistics   Dependencies   Dependents   DB_csv/postgr...   DB_csv/postgres@PostgreS

DB_csv/postgres@PostgreSQL 14

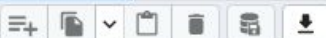Query   Query History

```
1   ----9. Level of consumption of Budweiser in the regions in Nigeria in 2019 (Decision on Prom
2
3   ----to create more promotion in the southsouth region
4
5   SELECT region, SUM (quantity) as Budweiser_consumption
6   FROM csv_table
7   WHERE brands = 'budweiser' AND countries = 'Nigeria' AND years = '2019'
8   GROUP BY region
9   ORDER BY SUM (quantity) DESC
```

Data output   Messages   Notifications

	region character varying (50)	budweiser_consumption bigint
1	Southeast	1821
2	northeast	990
3	northwest	948
4	west	884
5	southsouth	847

SECTION C - COUNTRIES ANALYSIS

Browser

- Foreign Data Wrappers
- Languages
- Publications
- Schemas (1)
  - public
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (1)
      - csv_table
        - Columns
        - Constraints
        - Indexes
        - RLS Policies
        - Rules
        - Triggers
    - Trigger Functions
    - Types
    - Views
- Subscriptions

Dashboard   Properties   SQL   Statistics   Dependencies   Dependents   DB_csv/postgr...   DB_csv/postgres@PostgreSQL 14*   public.csv_tabl...

DB_csv/postgres@PostgreSQL 14

Query   Query History

```
1   ---2. Highest sales personnel of Budweiser in Senegal
2
3
4   SELECT sales_rep, SUM(quantity) AS quantity_sold
5   FROM csv_table
6   WHERE  countries = 'Senegal' AND brands = 'budweiser'
7   GROUP BY sales_rep
8   ORDER BY SUM (quantity) DESC
9   LIMIT 1
```

Scratch Pad

Data output   Messages   Notifications

	sales_rep character varying (50)	quantity_sold bigint
1	Jones	5917

Total rows: 1 of 1   Query complete 00:00:00.135   Ln 2,

pgAdmin   File ∨   Object ∨   Tools ∨   Help ∨

Browser

DB_csv/postgr...   public.csv_tabl...   DB_csv/postgres@PostgreSQL 14*

DB_csv/postgres@PostgreSQL 14

Query   Query History

```
1   ---3. Country with the highest profit of the fourth quarter in 2019
2
3   SELECT countries, SUM(profit) AS profit
4   FROM csv_table
5   WHERE months IN ('October','November', 'December') AND years = 2019
6   GROUP BY countries
7   ORDER BY SUM (profit) DESC
8   LIMIT 1
```

Scratch Pad ✕

Data output   Messages   Notifications

	countries character varying (50)	profit bigint
1	Ghana	2045230

Browser tree (left panel):
- Foreign Data Wrappers
- Languages
- Publications
- Schemas (1)
  - public
    - Aggregates
    - Collations
    - Domains
    - FTS Configurations
    - FTS Dictionaries
    - FTS Parsers
    - FTS Templates
    - Foreign Tables
    - Functions
    - Materialized Views
    - Operators
    - Procedures
    - Sequences
    - Tables (1)
      - csv_table
        - Columns
        - Constraints
        - Indexes
        - RLS Policies
        - Rules
        - Triggers
    - Trigger Functions
    - Types
    - Views
- Subscriptions

Total rows: 1 of 1   Query complete 00:00:00.114