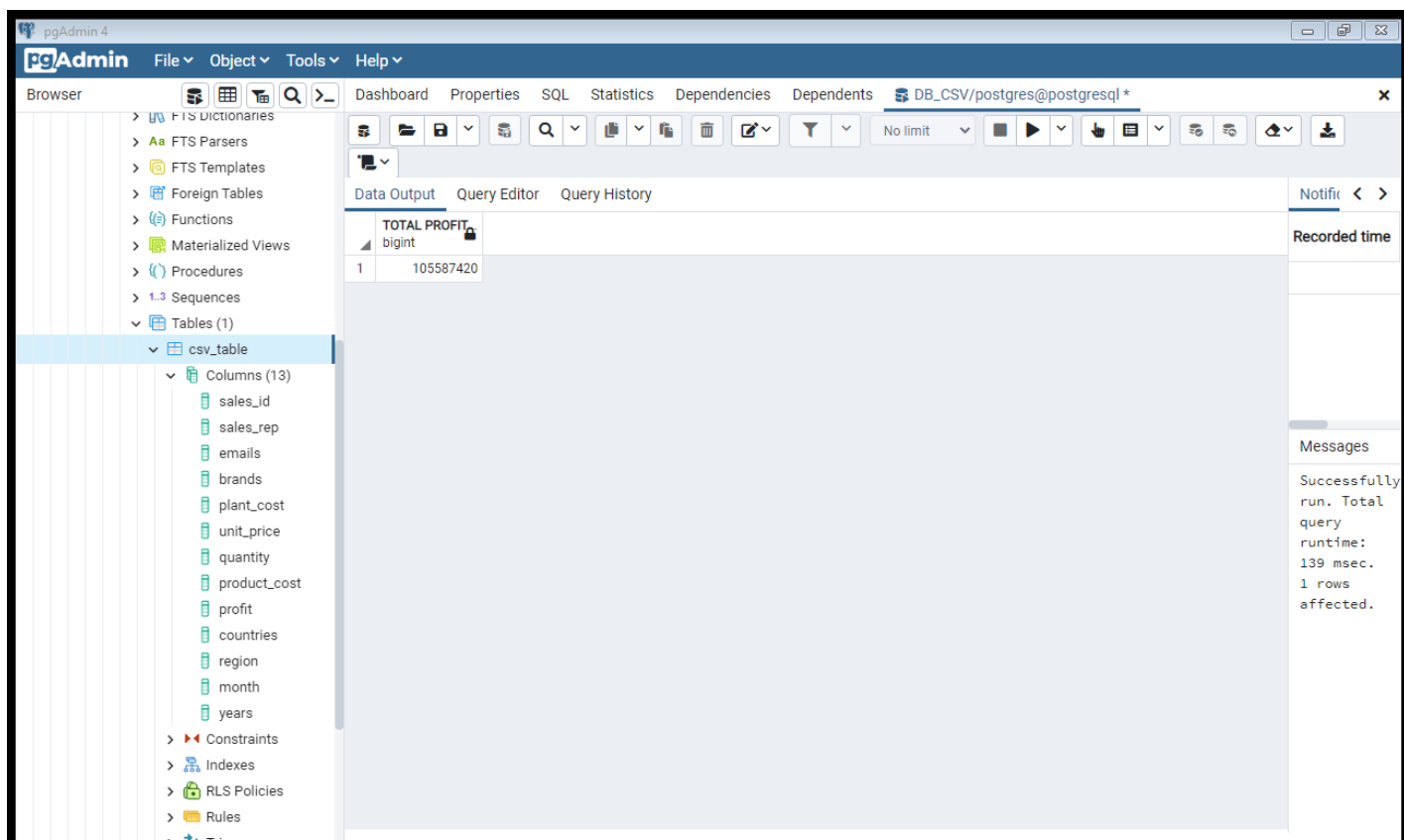
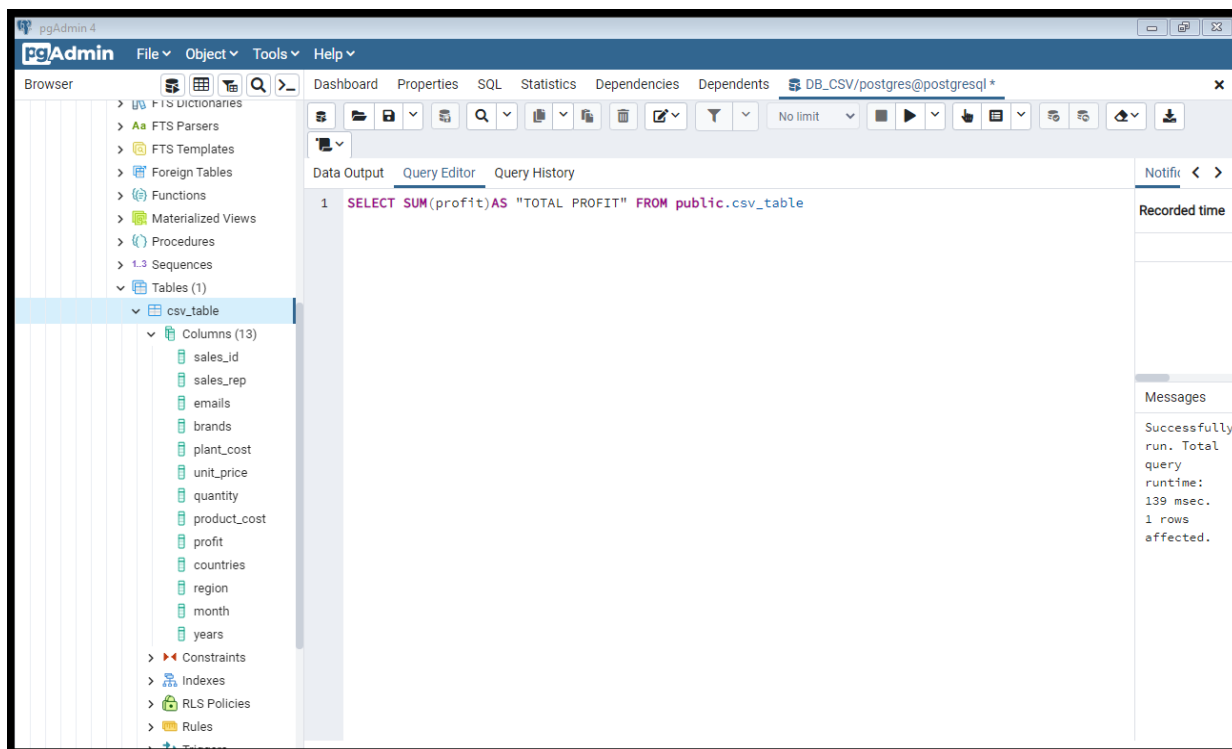


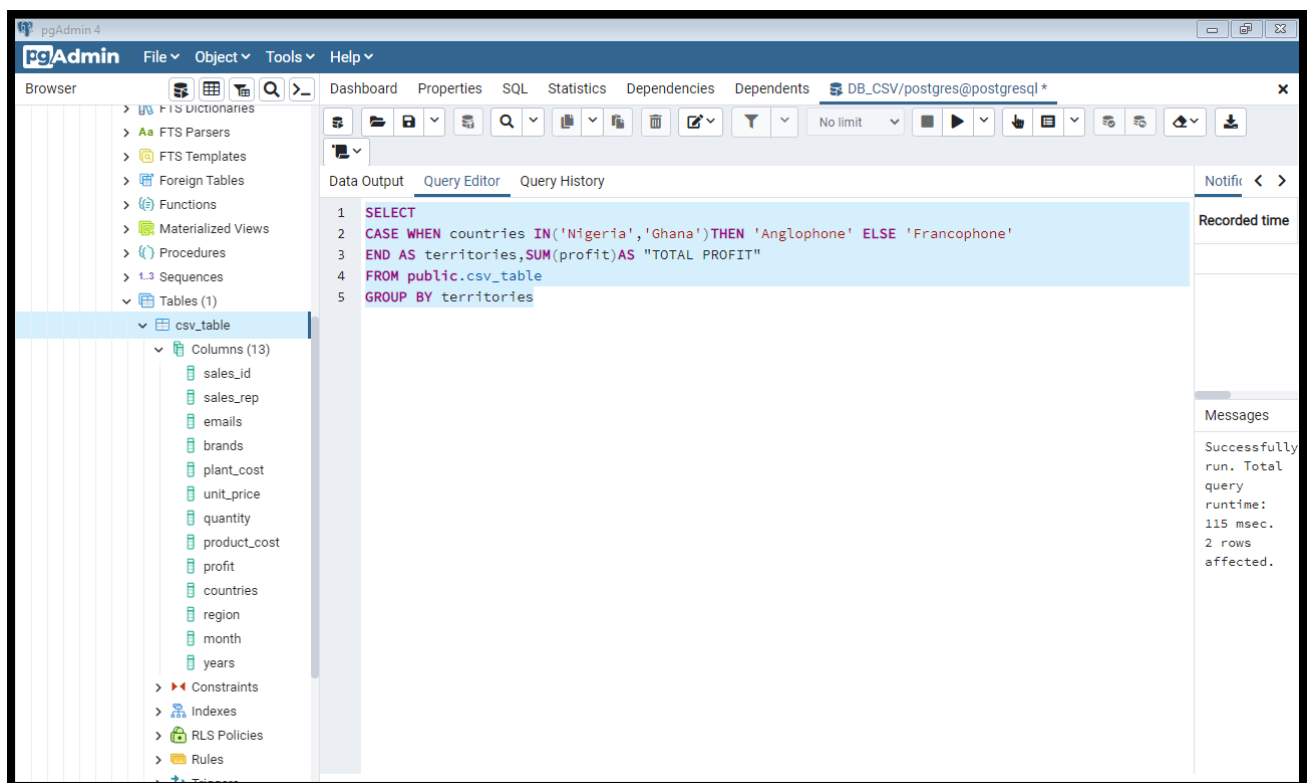
TAOFEEQ TAOFEEQAT OLAWUMI
CAPSTONE PROJECT(SQL)
SECTION A-C

.....



From the screenshot of the output, it shows that the profit worth of the 2 territories (Anglophone and francophone) is 105587420.

QUESTION 2:

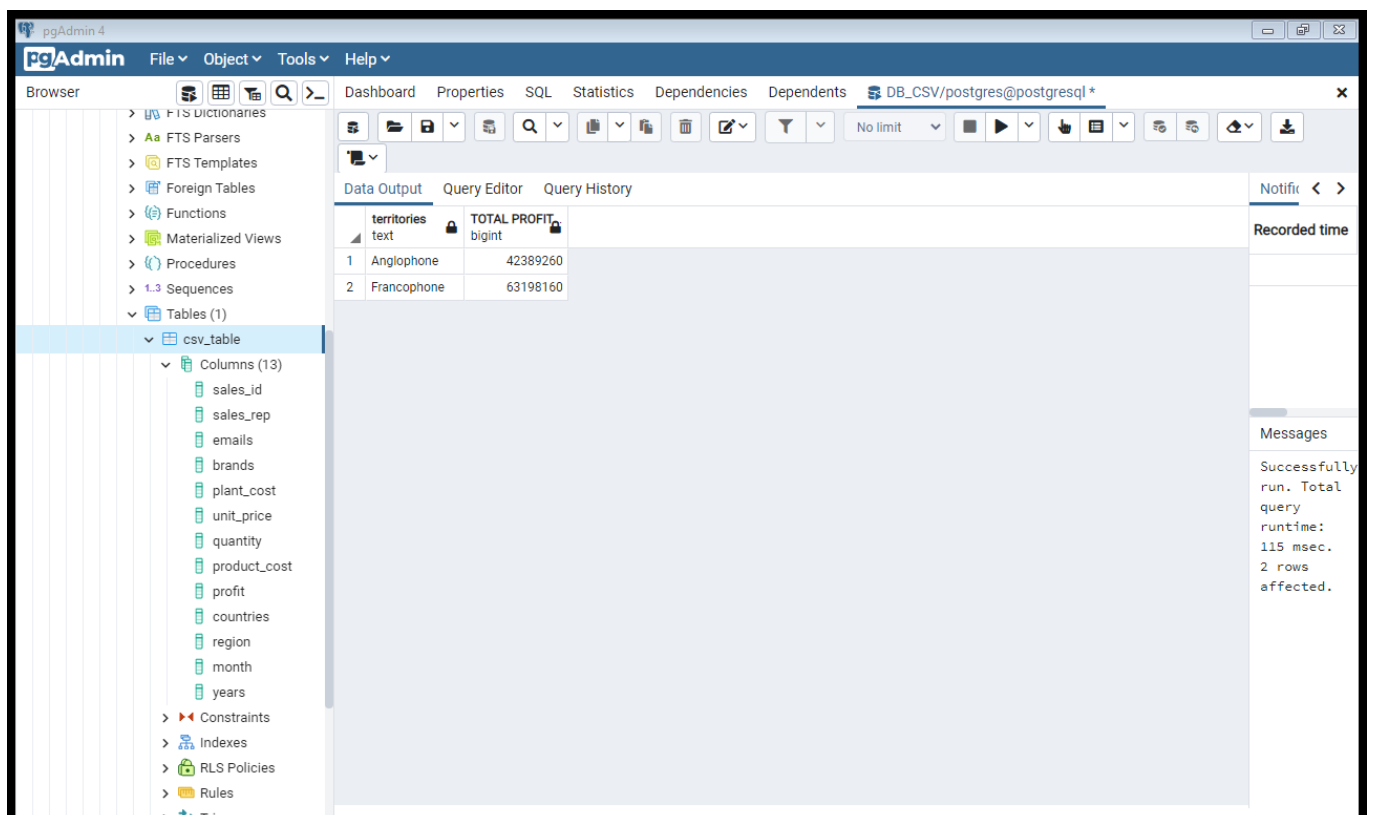


The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, including the 'csv_table' table with 13 columns. The main window shows the 'Query Editor' tab with the following SQL query:

```
1 SELECT
2 CASE WHEN countries IN('Nigeria','Ghana') THEN 'Anglophone' ELSE 'Francophone'
3 END AS territories, SUM(profit) AS "TOTAL PROFIT"
4 FROM public.csv_table
5 GROUP BY territories
```

The right sidebar shows the 'Messages' pane with the following text:

Successfully run. Total query runtime: 115 msec. 2 rows affected.



The screenshot shows the pgAdmin 4 interface with the 'Data Output' tab selected. The query results are displayed in a table with two columns: 'territories' (text) and 'TOTAL PROFIT' (bigint). The results are as follows:

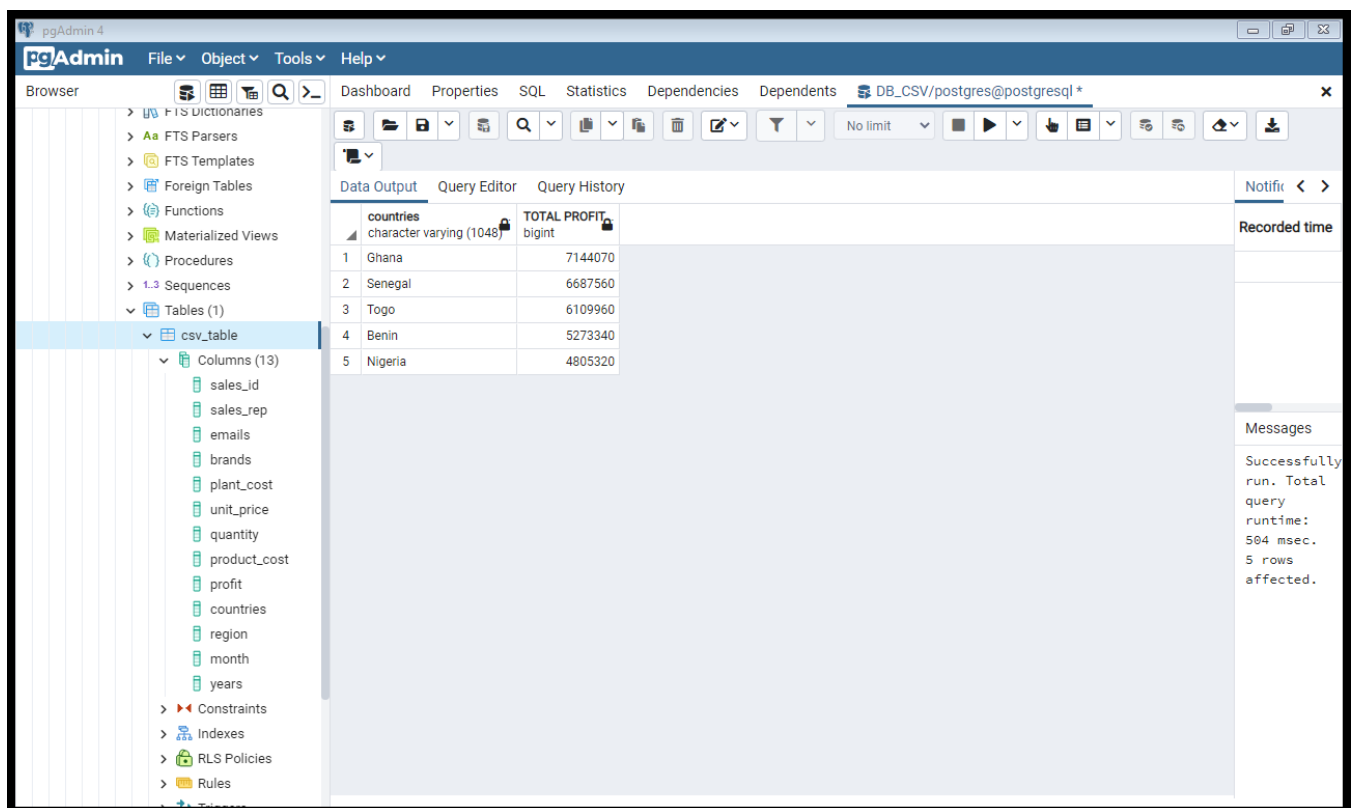
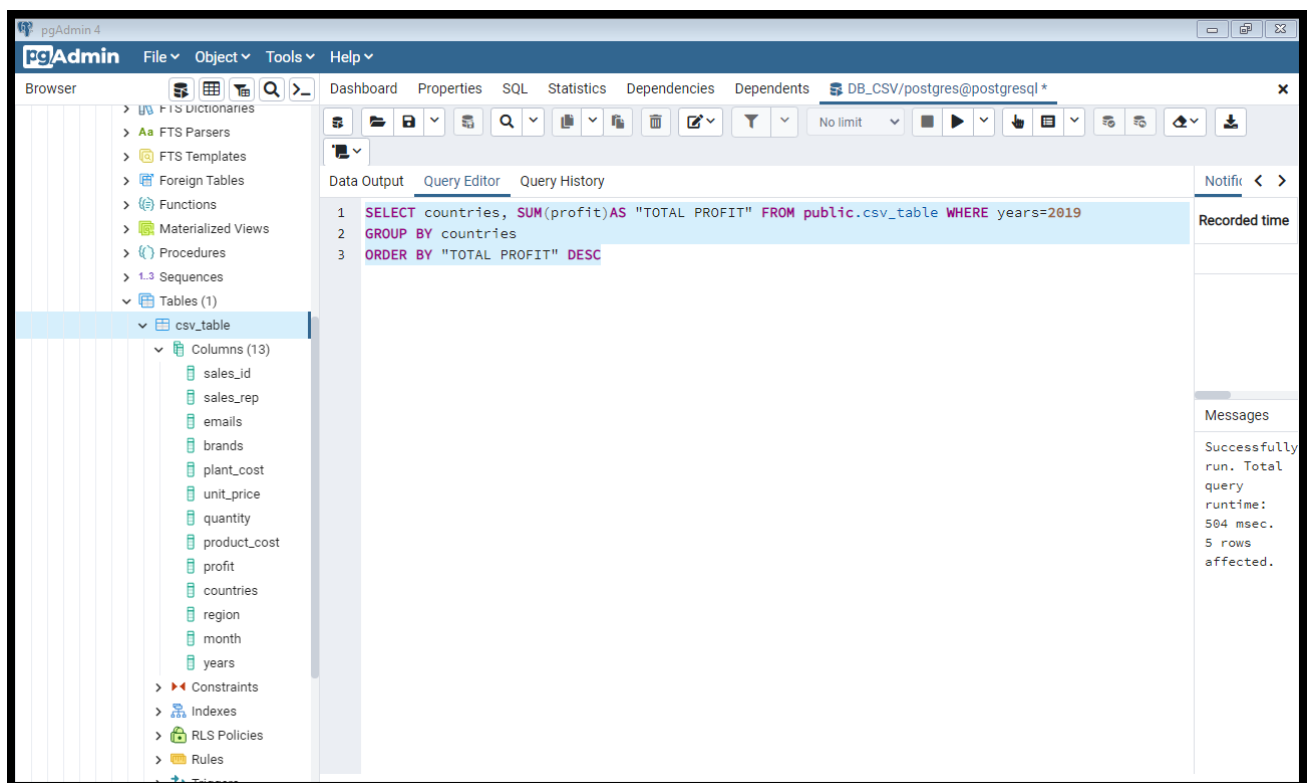
territories	TOTAL PROFIT
Anglophone	42389260
Francophone	63198160

The right sidebar shows the 'Messages' pane with the following text:

Successfully run. Total query runtime: 115 msec. 2 rows affected.

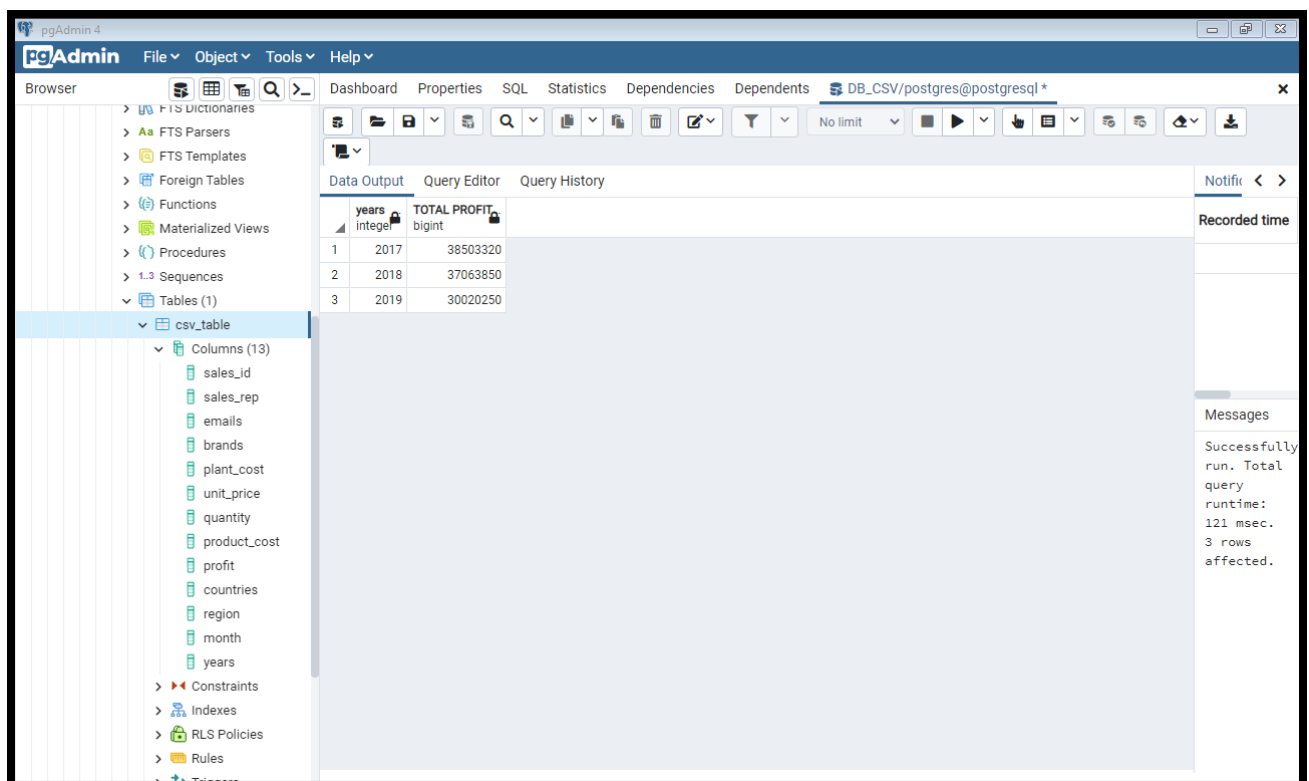
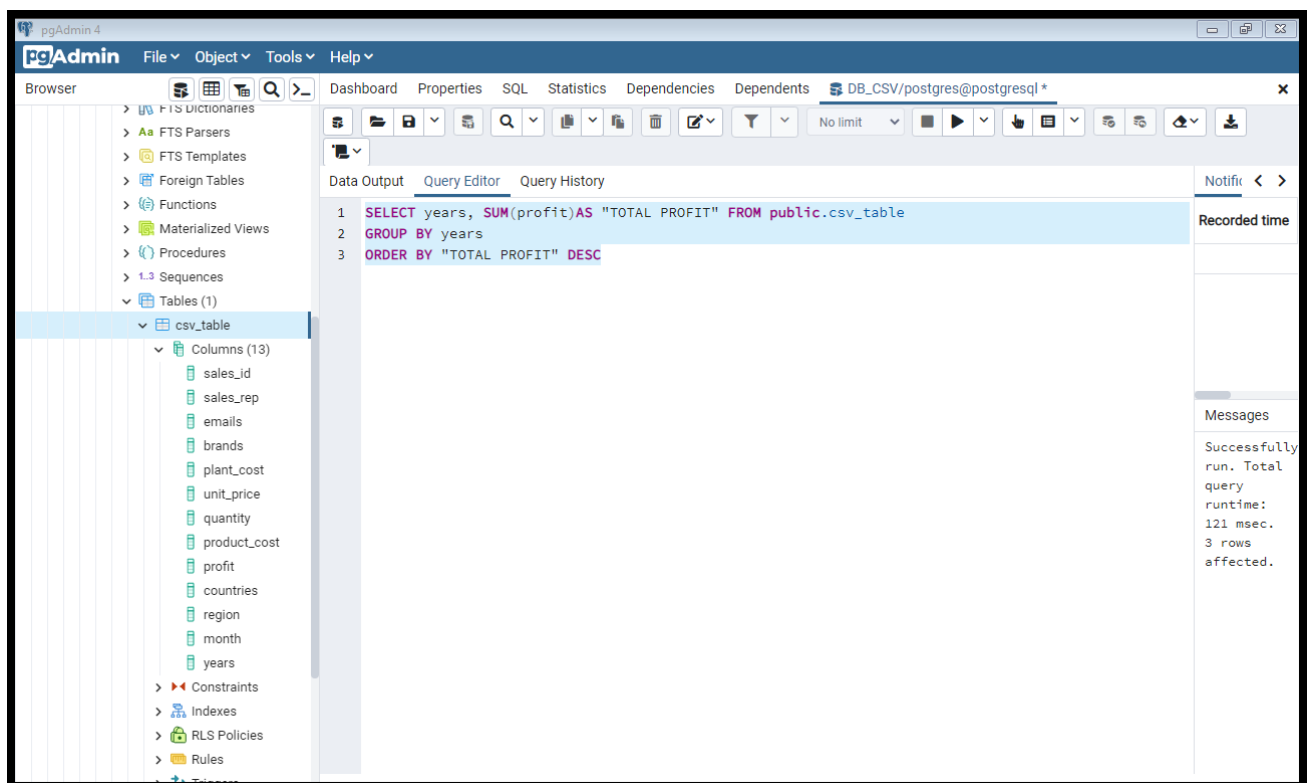
From the data output above, it can be deduced that total that the total profit generated from the **Francophone** countries is **63198160** which is higher than the **42389260** generated from the **Anglophone** countries.

QUESTION 3:



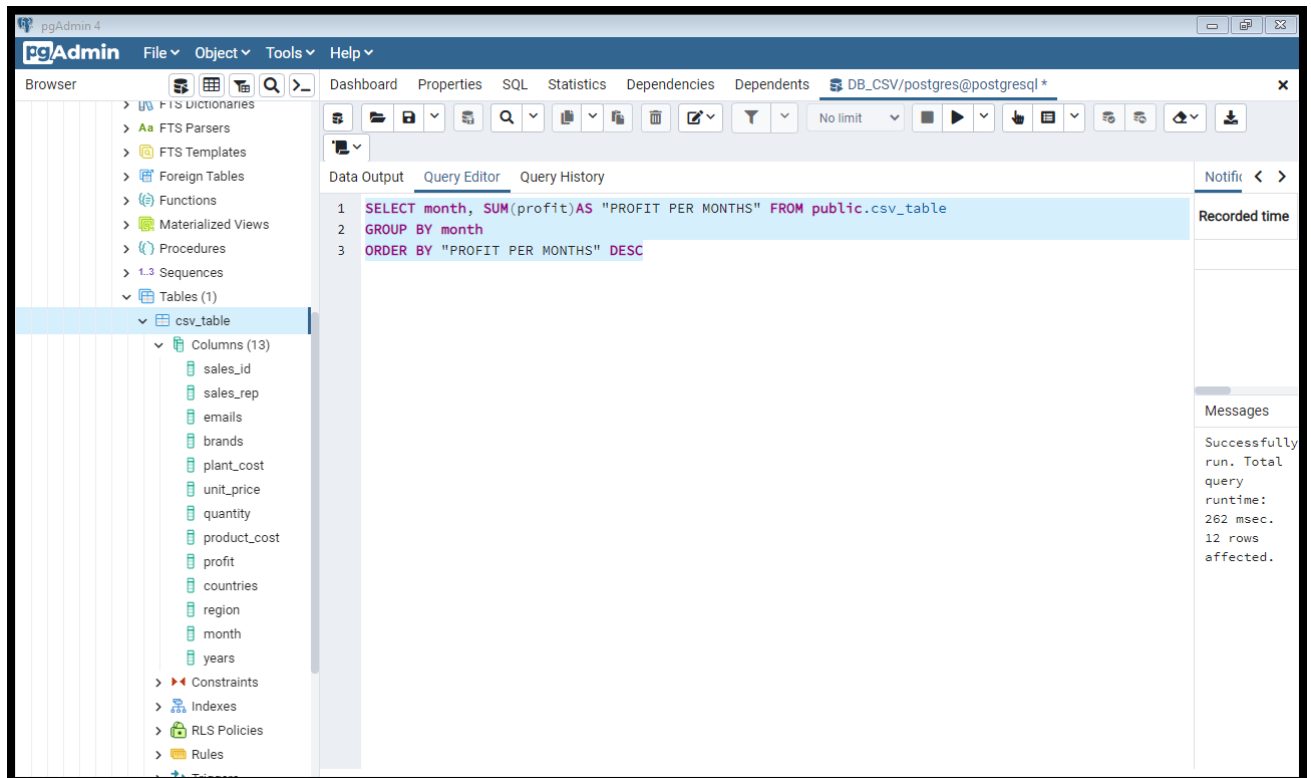
From the screenshot of the output above, **Ghana** generated the highest profit in 2019 with total profit of 7144070.

QUESTION 4:



From the screenshot above it can be deduced that the year which the highest profit was generated *is 2017* with a total profit of 38503320.

QUESTION 5:



The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with the 'csv_table' table selected under the 'Tables (1)' category. The main pane shows the 'Query Editor' with the following SQL query:

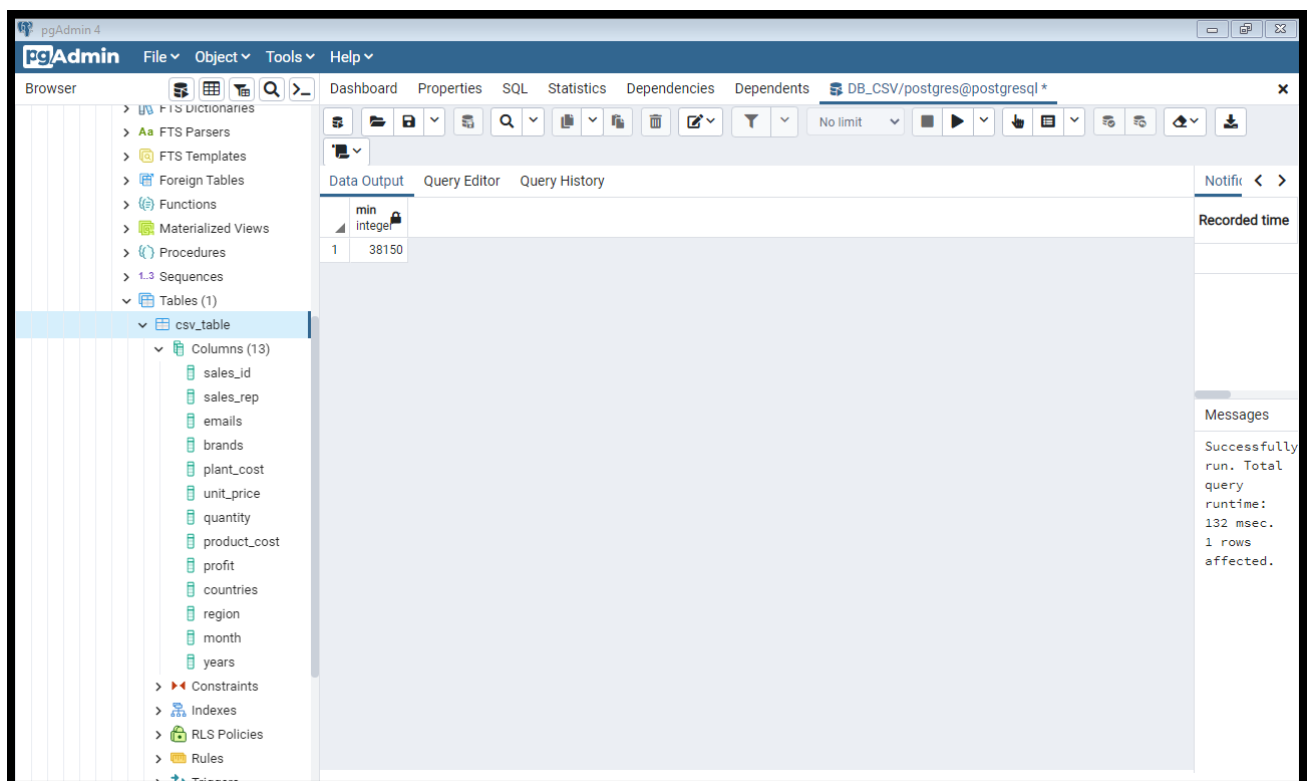
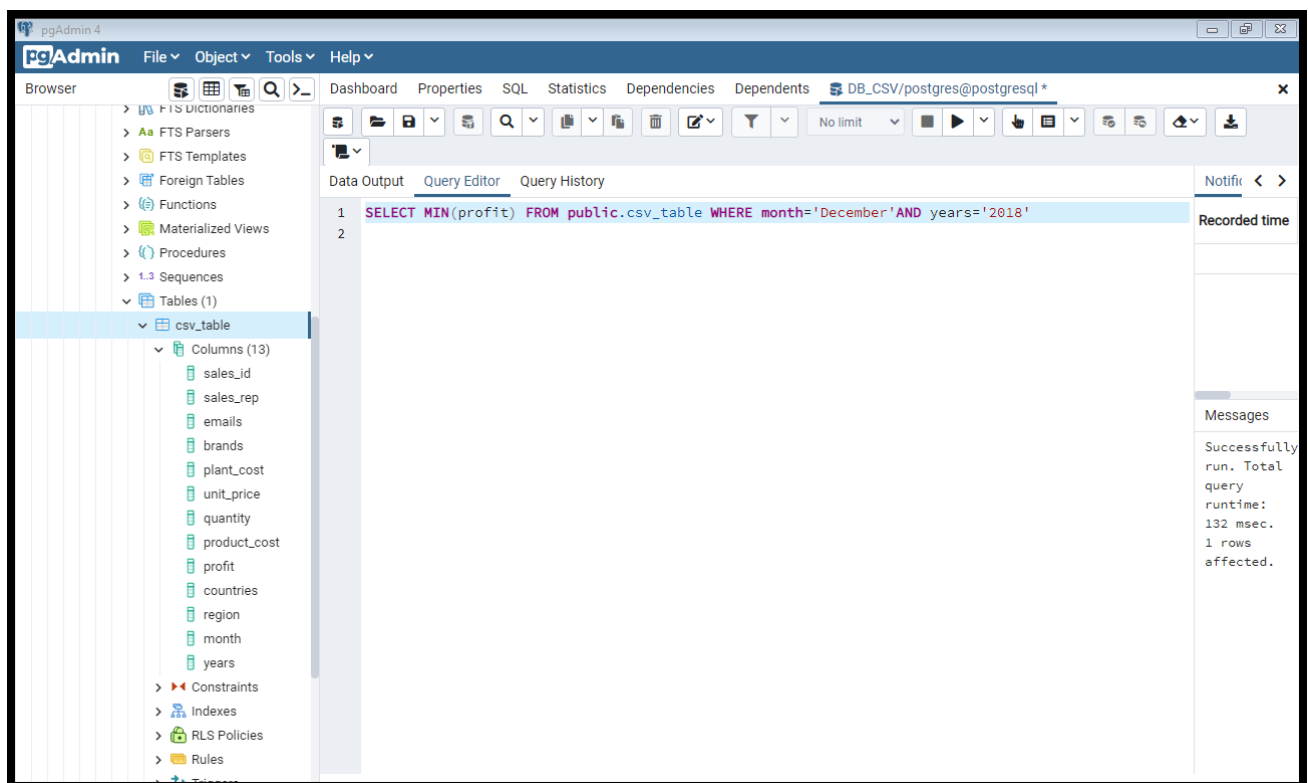
```
1 SELECT month, SUM(profit) AS "PROFIT PER MONTHS" FROM public.csv_table
2 GROUP BY month
3 ORDER BY "PROFIT PER MONTHS" DESC
```

The 'Data Output' tab is active, showing the results of the query. The 'Messages' pane on the right indicates that the query was successfully executed, affecting 12 rows.

month	PROFIT PER MONTHS
March	9066130
February	9028450
June	8828440
November	8820330
December	8787290
July	8787010
May	8772250
October	8767100
August	8730940
January	8722990
September	8702660
April	8573830

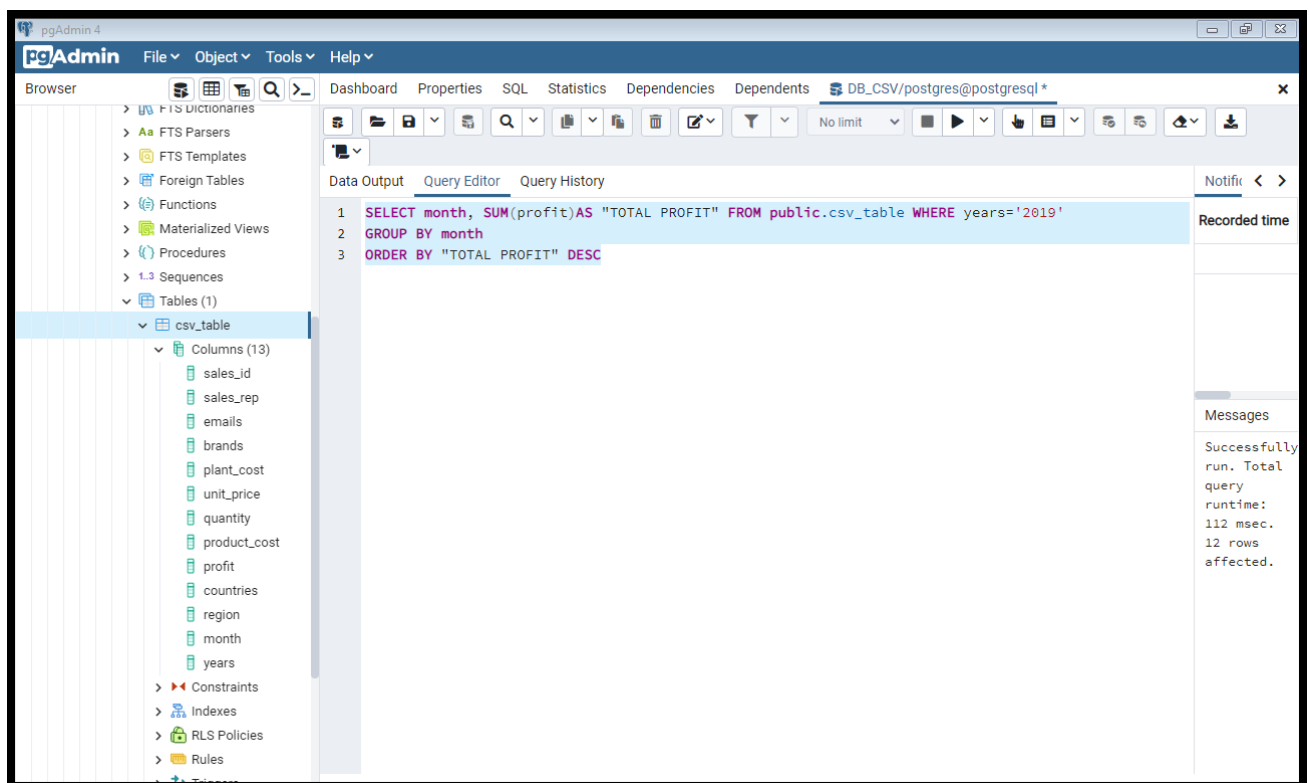
From the screenshot above, it can be deduced that the least profit was generated in the month of **April** with a profit value of 8573830.

QUESTION 6:



From the screenshot above it can be deduced that the Minimum profit in the month of December 2018 is **38150**.

QUESTION 7:



The screenshot shows the pgAdmin 4 interface with the following details:

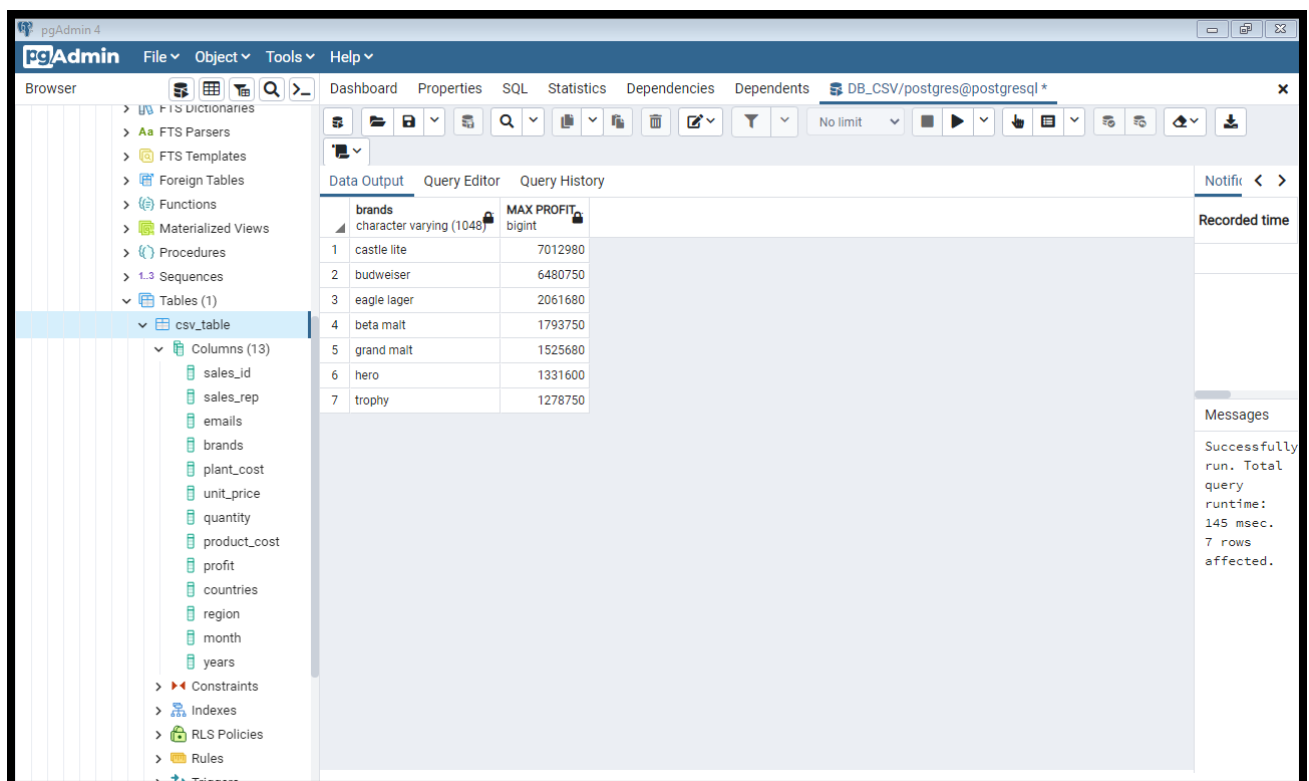
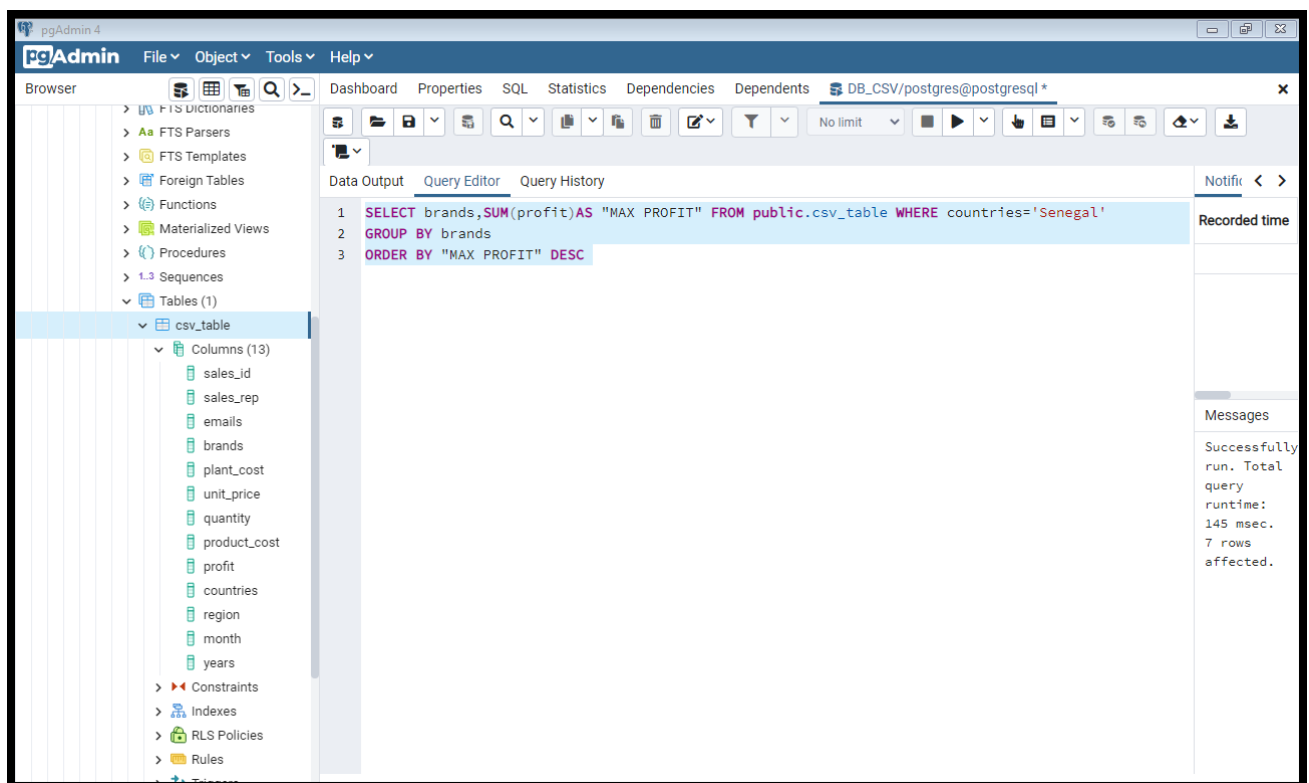
- Browser:** The tree view on the left shows the database structure. Under 'Tables (1)', the 'csv_table' is selected, and its columns are listed: sales_id, sales_rep, emails, brands, plant_cost, unit_price, quantity, product_cost, profit, countries, region, month, and years.
- Query Editor:** The SQL query is:

```
1 SELECT month, SUM(profit) AS "TOTAL PROFIT" FROM public.csv_table WHERE years='2019'
2 GROUP BY month
3 ORDER BY "TOTAL PROFIT" DESC
```
- Data Output:** The query results are displayed in a table with two columns: 'month' (character varying (1048)) and 'TOTAL PROFIT' (bigint). The results are ordered by total profit in descending order.
- Messages:** A message on the right states: 'Successfully run. Total query runtime: 112 msec. 12 rows affected.'

month	TOTAL PROFIT
January	3263160
August	2982800
July	2945340
April	2851470
November	2675610
June	2669080
May	2573040
March	2530620
October	2220870
December	2048780
September	1892600
February	1366880

Comparing the profit generated by each month in the year 2019, it can be deduced from the screenshot above that the highest profit was generated in **January** and the lowest in **February**.

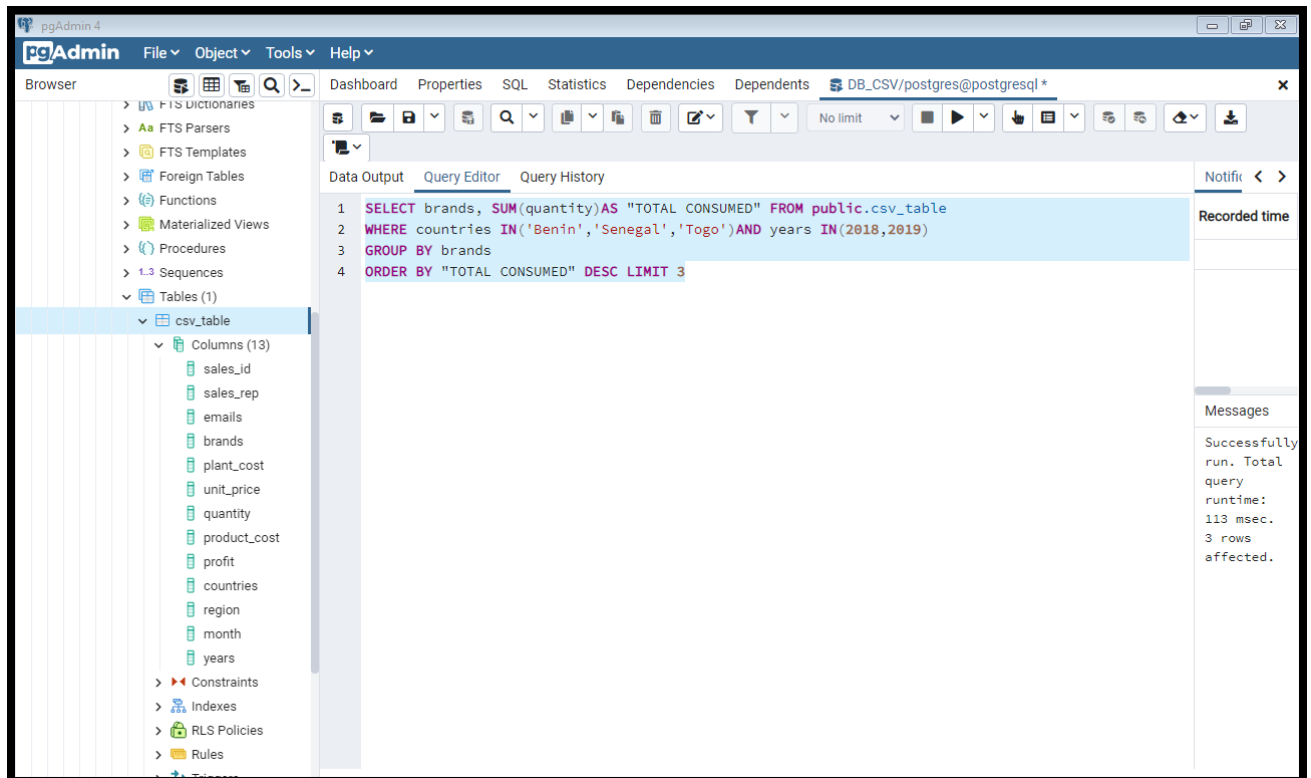
QUESTION 8:



From the screenshot above, it can be deduced that the brand that generated the highest profit in Senegal is **Castle lite** with a total profit of 7012980.

SECTION B: BRAND ANALYSIS

QUESTION 1:

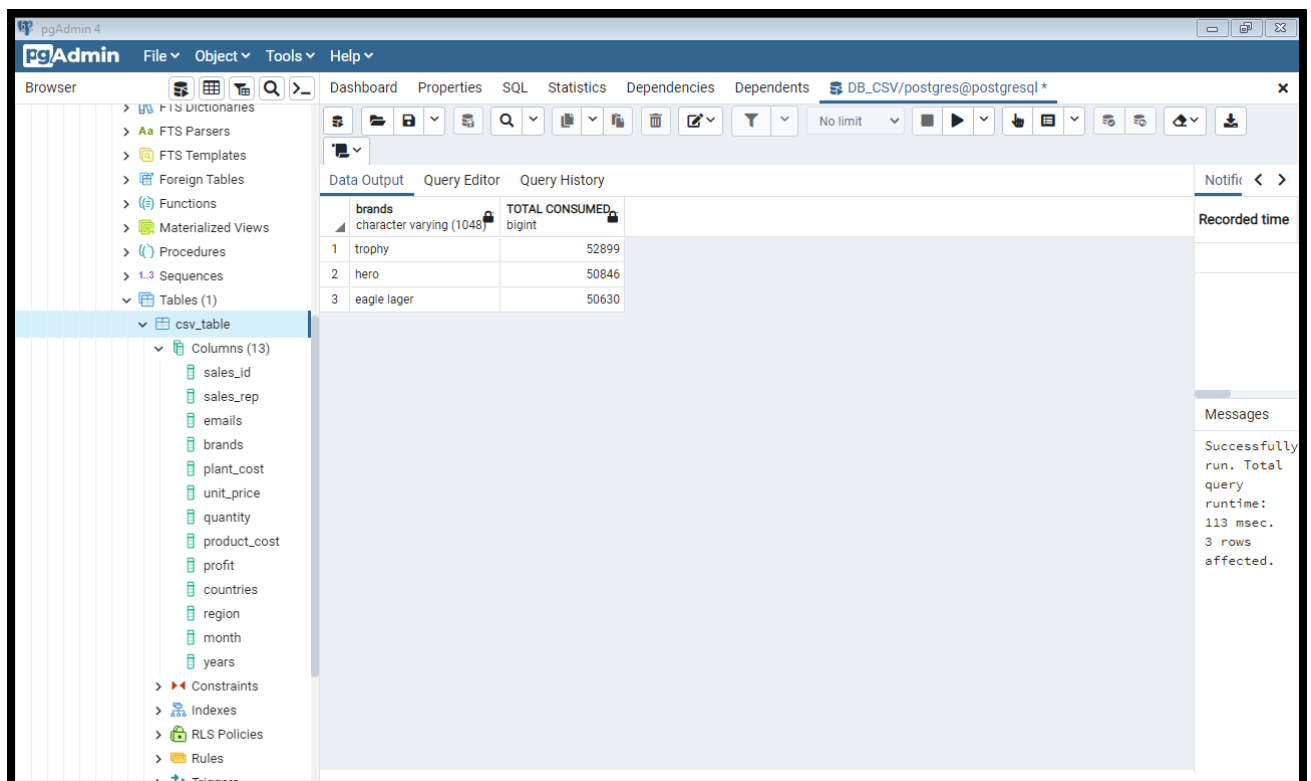


The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with 'csv_table' selected under 'Tables (1)'. The central pane shows the SQL query editor with the following query:

```
1 SELECT brands, SUM(quantity)AS "TOTAL CONSUMED" FROM public.csv_table
2 WHERE countries IN('Benin','Senegal','Togo')AND years IN(2018,2019)
3 GROUP BY brands
4 ORDER BY "TOTAL CONSUMED" DESC LIMIT 3
```

The right sidebar shows the 'Messages' tab with the following output:

```
Successfully
run. Total
query
runtime:
113 msec.
3 rows
affected.
```



The screenshot shows the pgAdmin 4 interface with the same SQL query executed. The 'Data Output' tab is active, displaying the results in a table:

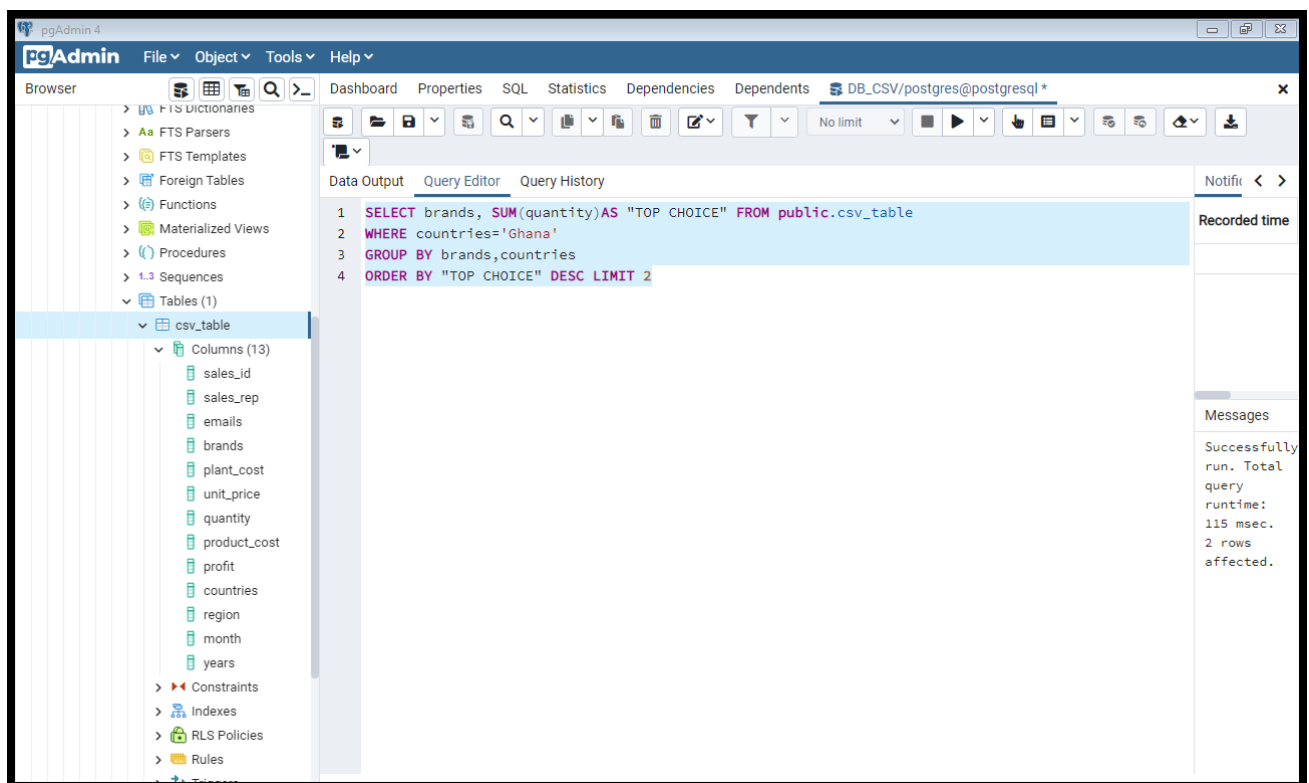
brands	TOTAL CONSUMED
trophy	52899
hero	50846
eagle lager	50630

The right sidebar shows the 'Messages' tab with the same output as the first screenshot:

```
Successfully
run. Total
query
runtime:
113 msec.
3 rows
affected.
```

The top 3 brands consumed in the francophone countries are ***Trophy, Hero and Eagle lager***.

QUESTION 2:

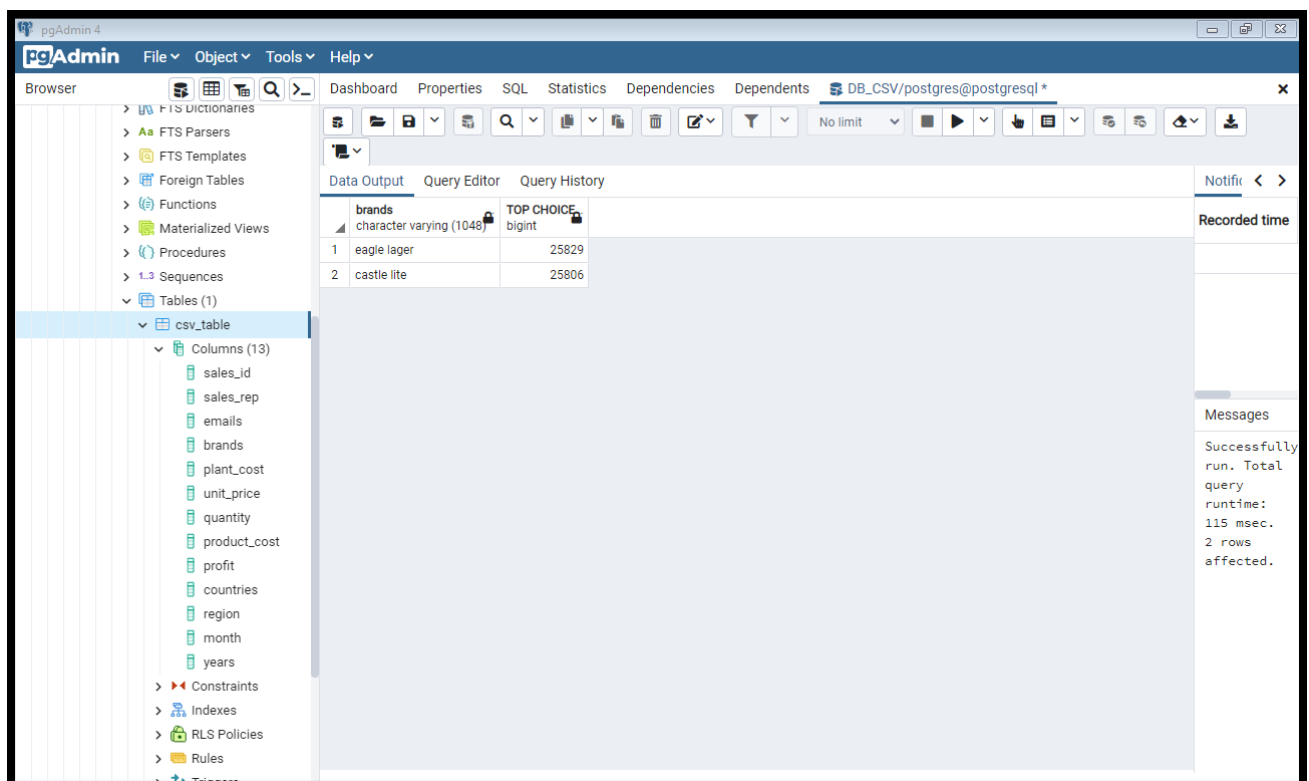


The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with the 'csv_table' table selected under the 'Tables (1)' category. The main pane shows the 'Query Editor' with the following SQL query:

```
1 SELECT brands, SUM(quantity) AS "TOP CHOICE" FROM public.csv_table
2 WHERE countries='Ghana'
3 GROUP BY brands,countries
4 ORDER BY "TOP CHOICE" DESC LIMIT 2
```

The right sidebar shows the 'Messages' pane with the following text:

Successfully run. Total query runtime: 115 msec. 2 rows affected.



The screenshot shows the pgAdmin 4 interface with the same SQL query as above. The 'Data Output' pane displays the results of the query:

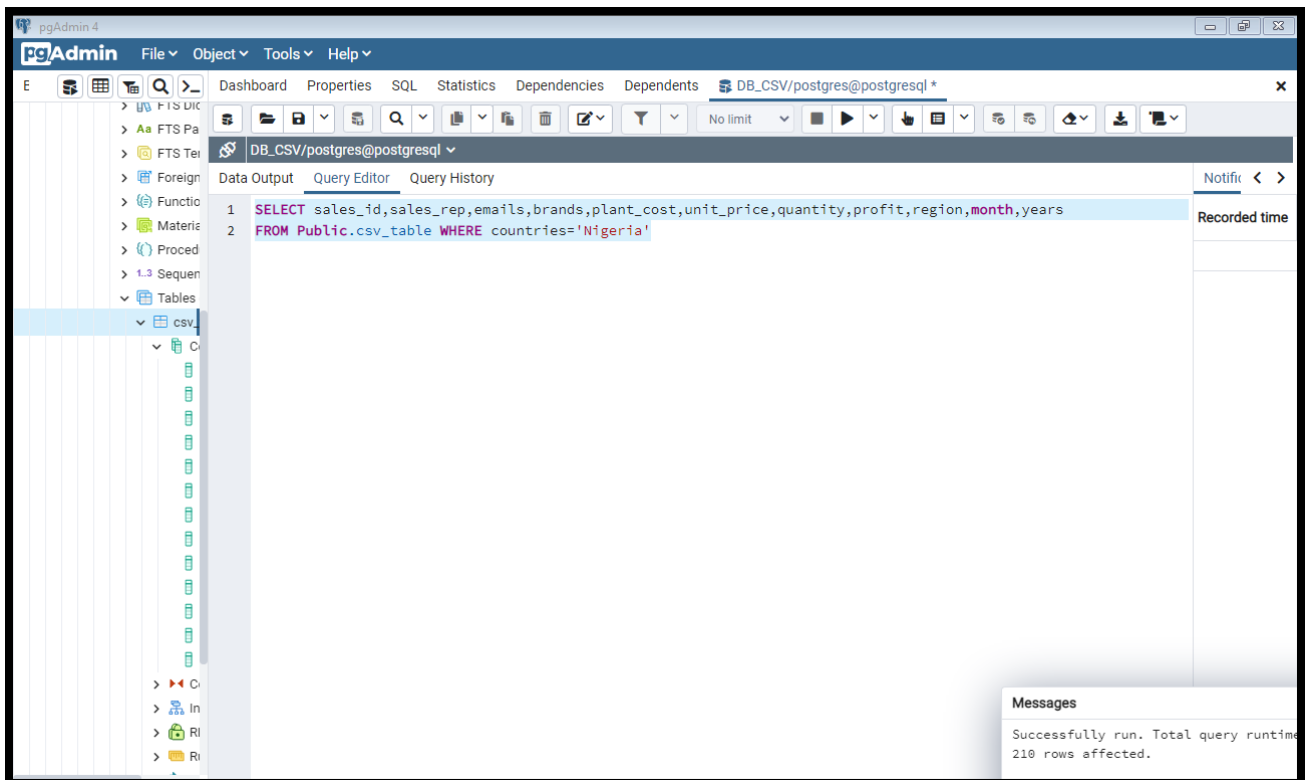
brands	TOP CHOICE
eagle lager	25829
castle lite	25806

The right sidebar shows the 'Messages' pane with the following text:

Successfully run. Total query runtime: 115 msec. 2 rows affected.

Using the quantity consumed to determine the choice of consumer brands, it can be deduced from the screenshot above that **Eagle lager** and **Castle lite** are the top 2 choice of consumer brands.

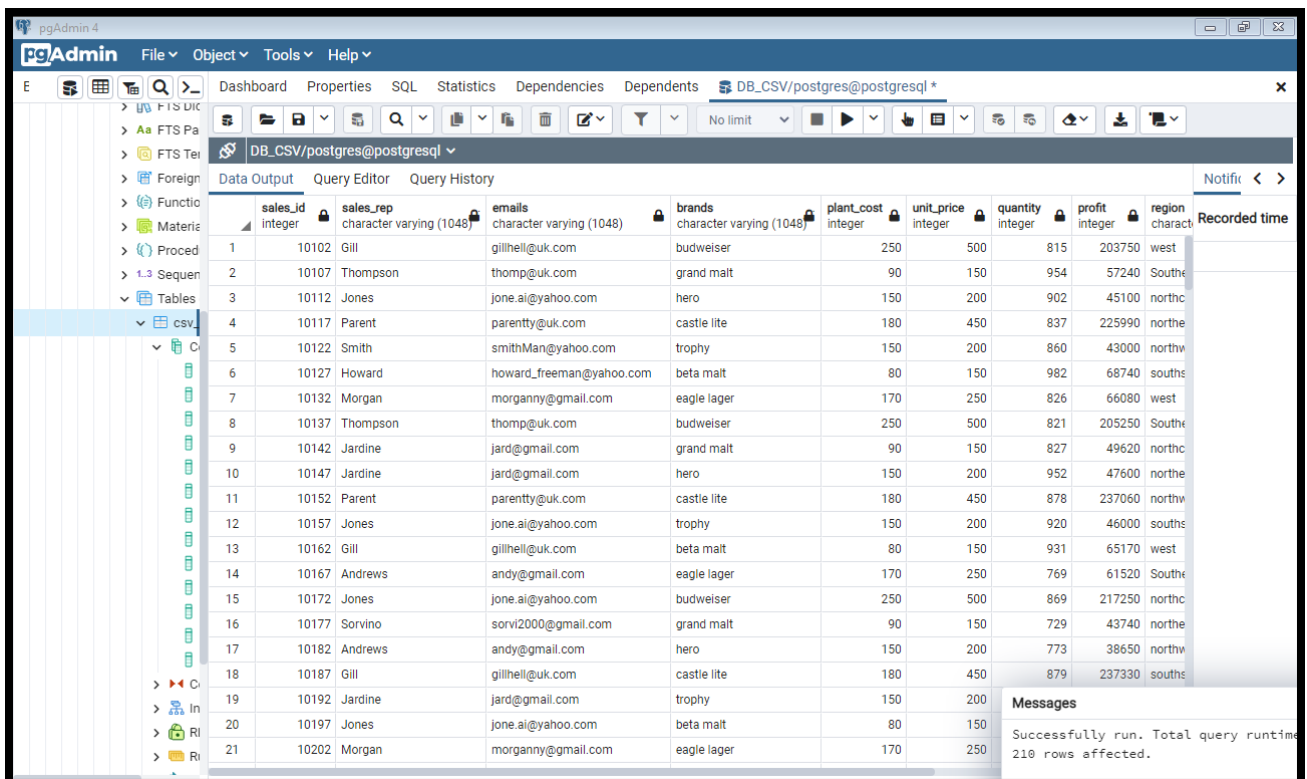
QUESTION 3:



The screenshot shows the pgAdmin 4 interface. The left sidebar displays a tree view of the database structure, with the 'csv' table selected under the 'Public' schema. The main window is the 'Query Editor' for the 'DB_CSV/postgres@postgresql' connection. The query editor contains the following SQL query:

```
1 SELECT sales_id,sales_rep,emails,brands,plant_cost,unit_price,quantity,profit,region,month,years
2 FROM Public.csv_table WHERE countries='Nigeria'
```

The 'Data Output' tab is active, but no data is displayed yet. A 'Messages' panel at the bottom right shows a success message: 'Successfully run. Total query runtime 210 rows affected.'



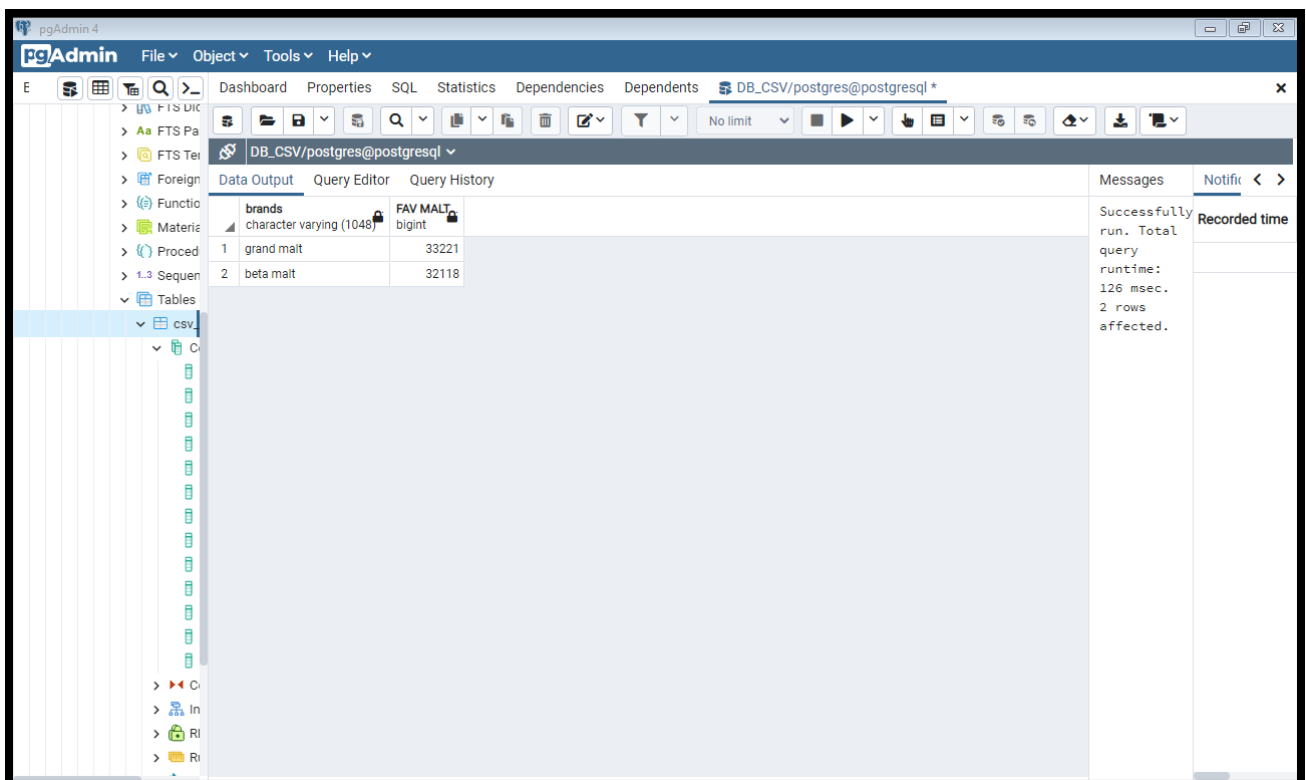
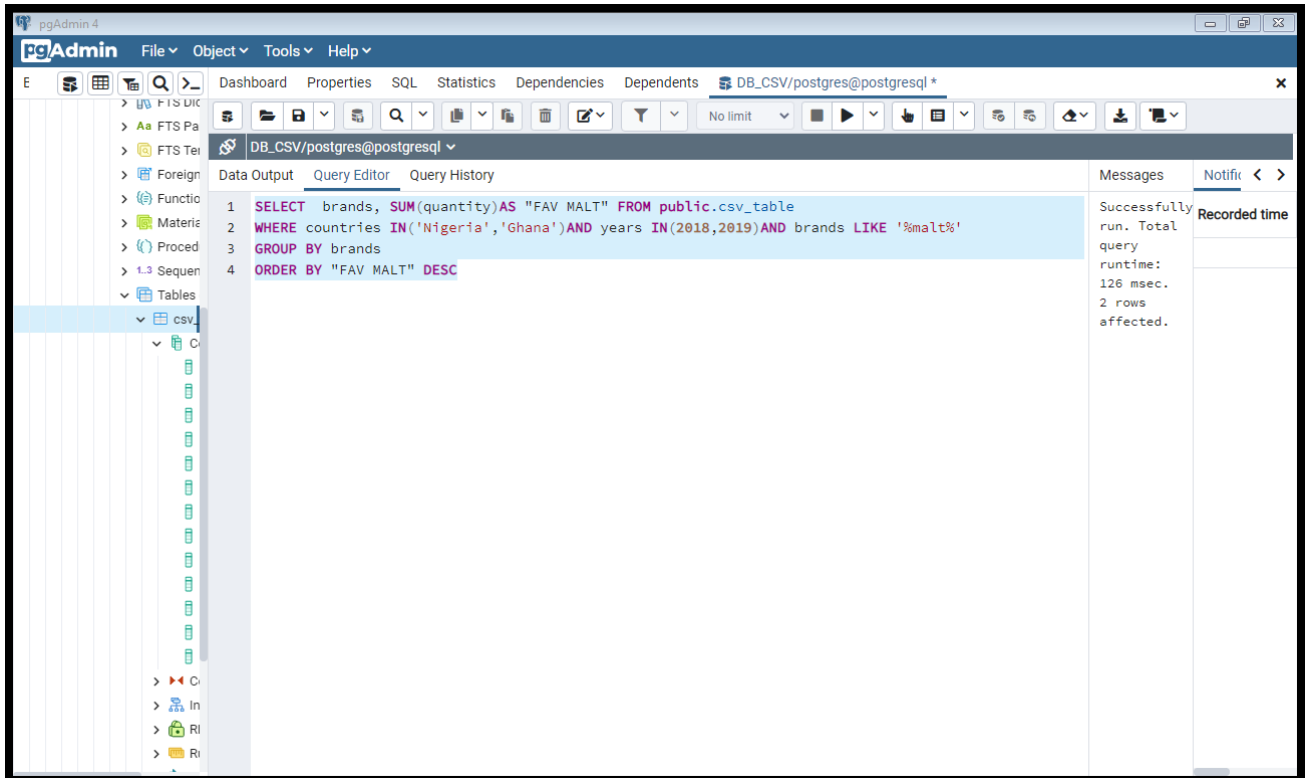
The screenshot shows the pgAdmin 4 interface with the 'Data Output' tab active. The query results are displayed in a table with 11 columns: sales_id, sales_rep, emails, brands, plant_cost, unit_price, quantity, profit, region, month, and years. The results are sorted by sales_id in ascending order. The table contains 21 rows of data, all of which are for the region 'Nigeria'.

sales_id	sales_rep	emails	brands	plant_cost	unit_price	quantity	profit	region	month	years
1	10102	Gill	gillhell@uk.com	budweiser	250	500	815	203750	west	
2	10107	Thompson	thomp@uk.com	grand malt	90	150	954	57240	South	
3	10112	Jones	jone.ai@yahoo.com	hero	150	200	902	45100	north	
4	10117	Parent	parentty@uk.com	castle lite	180	450	837	225990	north	
5	10122	Smith	smithMan@yahoo.com	trophy	150	200	860	43000	north	
6	10127	Howard	howard_freeman@yahoo.com	beta malt	80	150	982	68740	south	
7	10132	Morgan	morganny@gmail.com	eagle lager	170	250	826	66080	west	
8	10137	Thompson	thomp@uk.com	budweiser	250	500	821	205250	South	
9	10142	Jardine	jard@gmail.com	grand malt	90	150	827	49620	north	
10	10147	Jardine	jard@gmail.com	hero	150	200	952	47600	north	
11	10152	Parent	parentty@uk.com	castle lite	180	450	878	237060	north	
12	10157	Jones	jone.ai@yahoo.com	trophy	150	200	920	46000	south	
13	10162	Gill	gillhell@uk.com	beta malt	80	150	931	65170	west	
14	10167	Andrews	andy@gmail.com	eagle lager	170	250	769	61520	South	
15	10172	Jones	jone.ai@yahoo.com	budweiser	250	500	869	217250	north	
16	10177	Sorvino	sorvi2000@gmail.com	grand malt	90	150	729	43740	north	
17	10182	Andrews	andy@gmail.com	hero	150	200	773	38650	north	
18	10187	Gill	gillhell@uk.com	castle lite	180	450	879	237330	south	
19	10192	Jardine	jard@gmail.com	trophy	150	200				
20	10197	Jones	jone.ai@yahoo.com	beta malt	80	150				
21	10202	Morgan	morganny@gmail.com	eagle lager	170	250				

A 'Messages' panel at the bottom right shows a success message: 'Successfully run. Total query runtime 210 rows affected.'

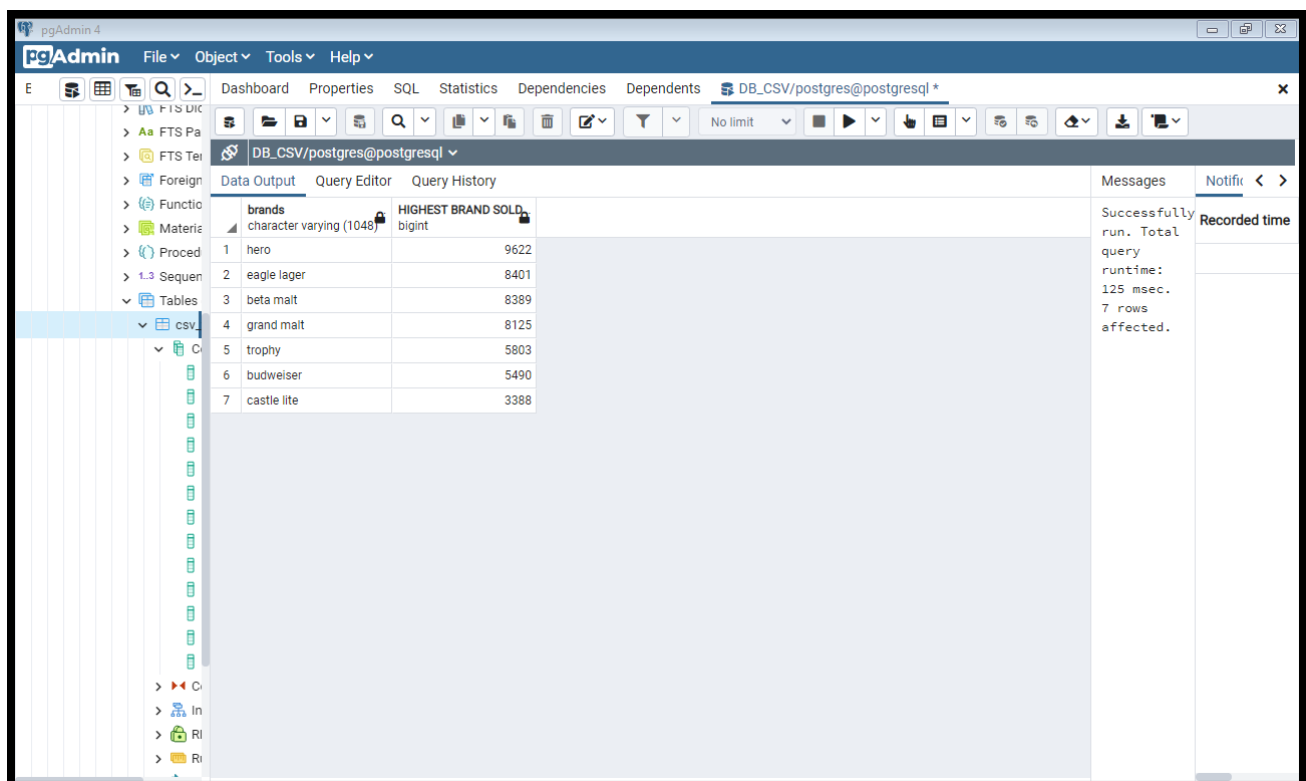
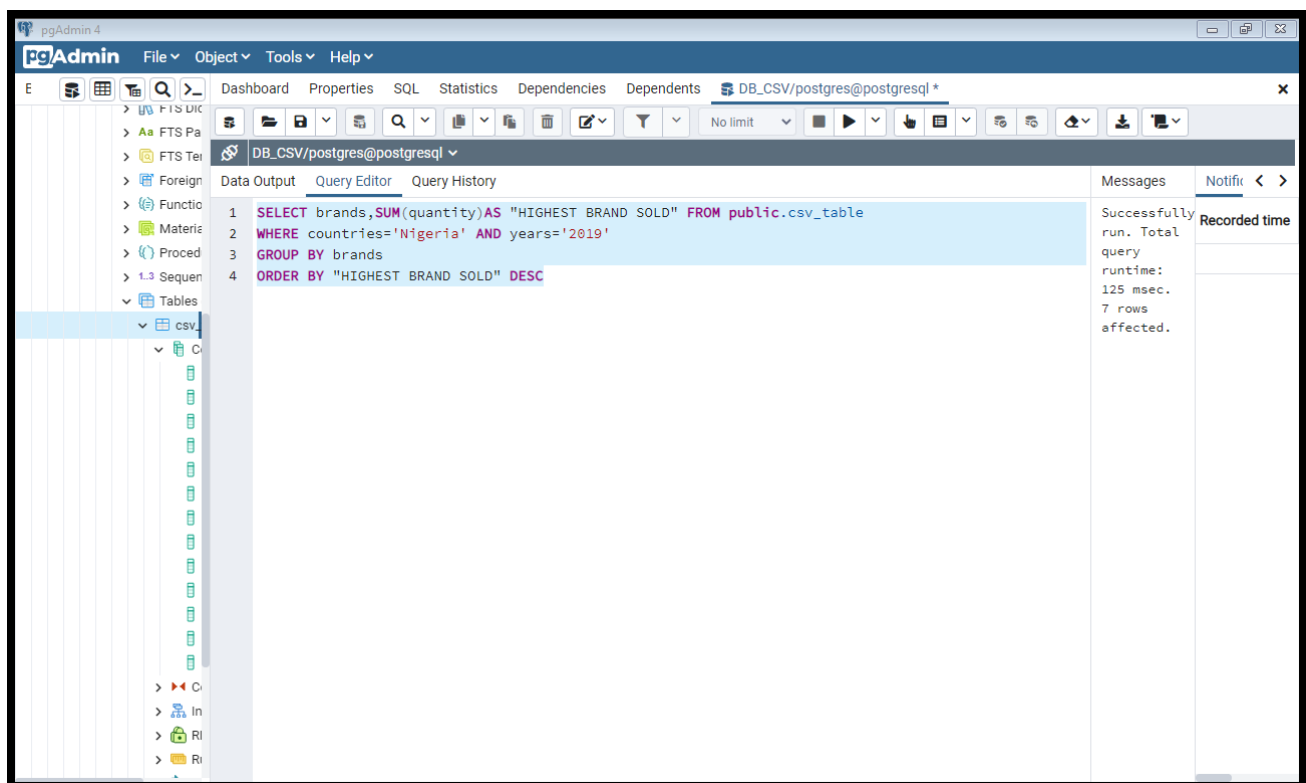
The detail of oil consumed in **Nigeria** which is the most oil reached country in west Africa is shown above.

QUESTION 4:



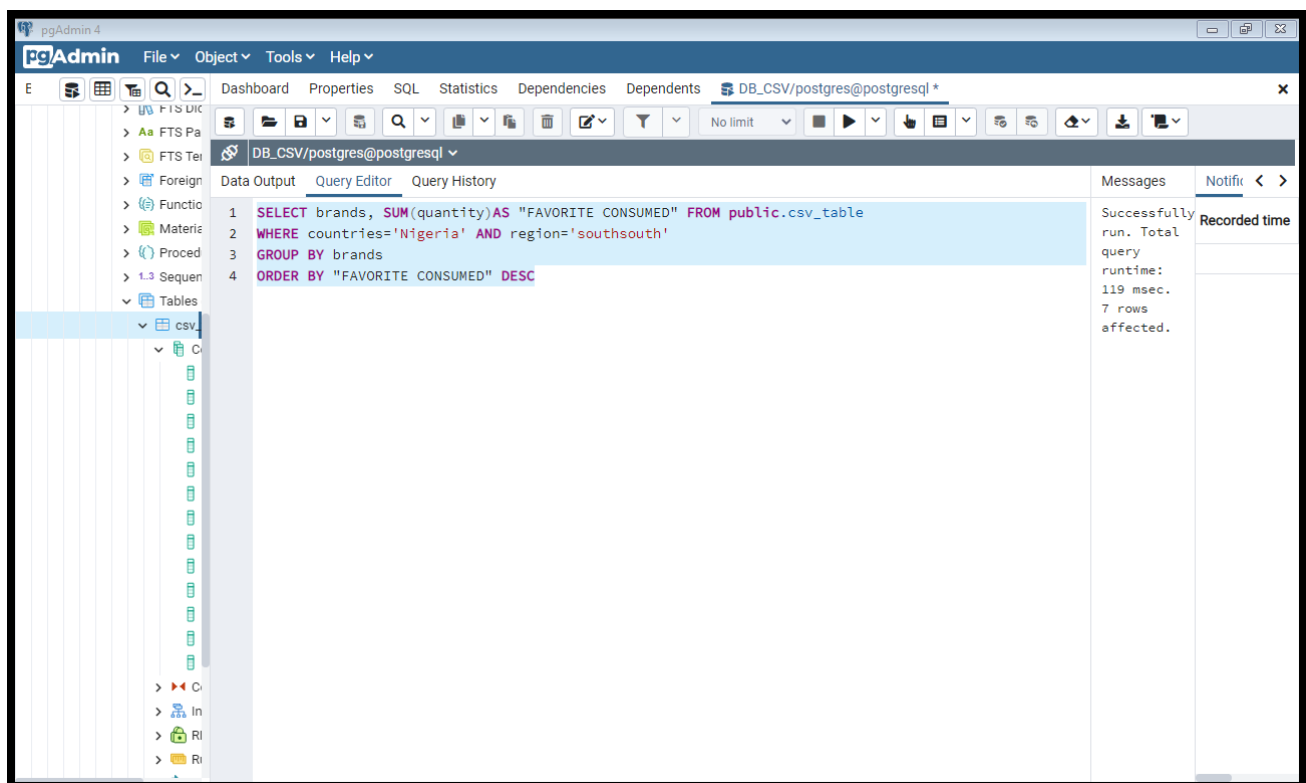
Using the quantity consumed to determine the Favorite malt brand in Anglophone territories, it can be seen from the screenshot that **GRAND MALT** is the Favorite malt brand in Anglophone territories.

QUESTION 5:



From the screenshot above, it can be deduced that the brand that sold the highest in Nigeria in the year 2019 is **HERO**.

QUESTION 6:

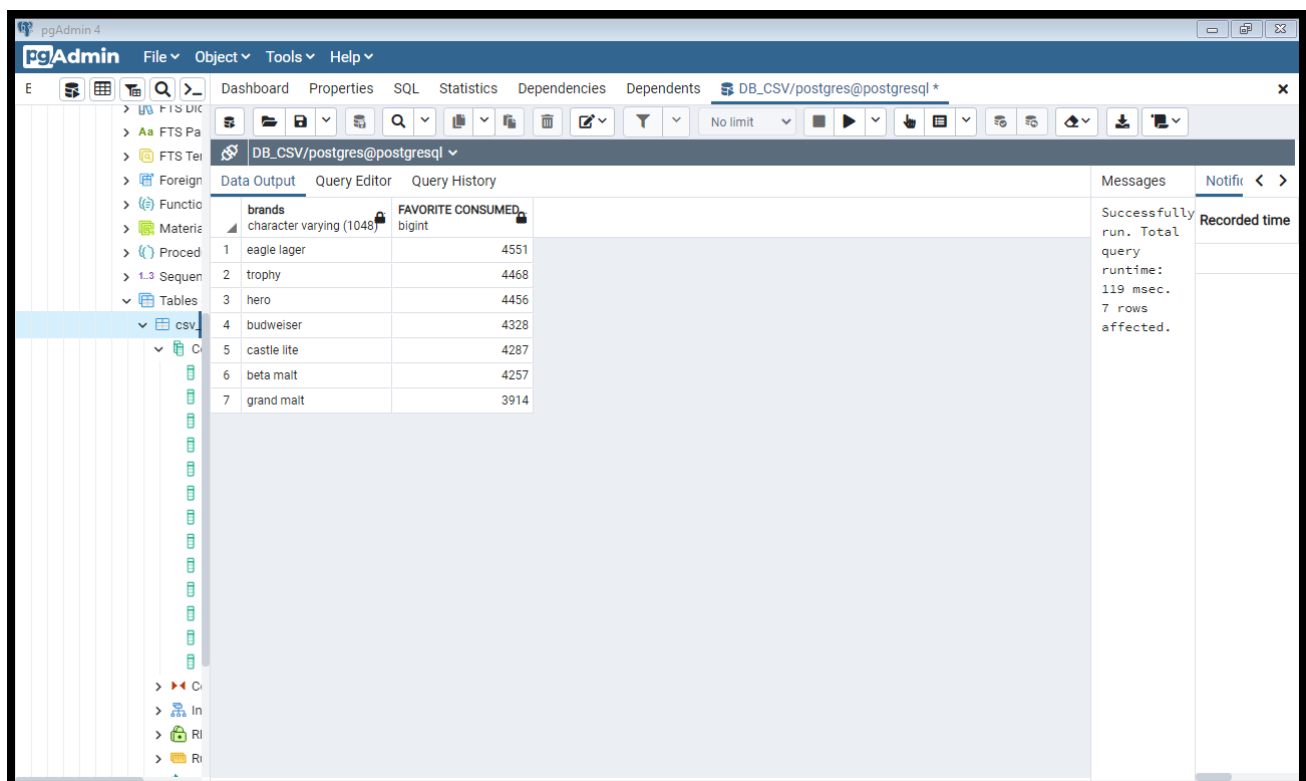


The screenshot shows the pgAdmin 4 interface. The Query Editor is active, displaying the following SQL query:

```
1 SELECT brands, SUM(quantity) AS "FAVORITE CONSUMED" FROM public.csv_table
2 WHERE countries='Nigeria' AND region='southsouth'
3 GROUP BY brands
4 ORDER BY "FAVORITE CONSUMED" DESC
```

The Messages pane on the right shows the execution results:

```
Successfully run. Total query runtime: 119 msec. 7 rows affected.
```

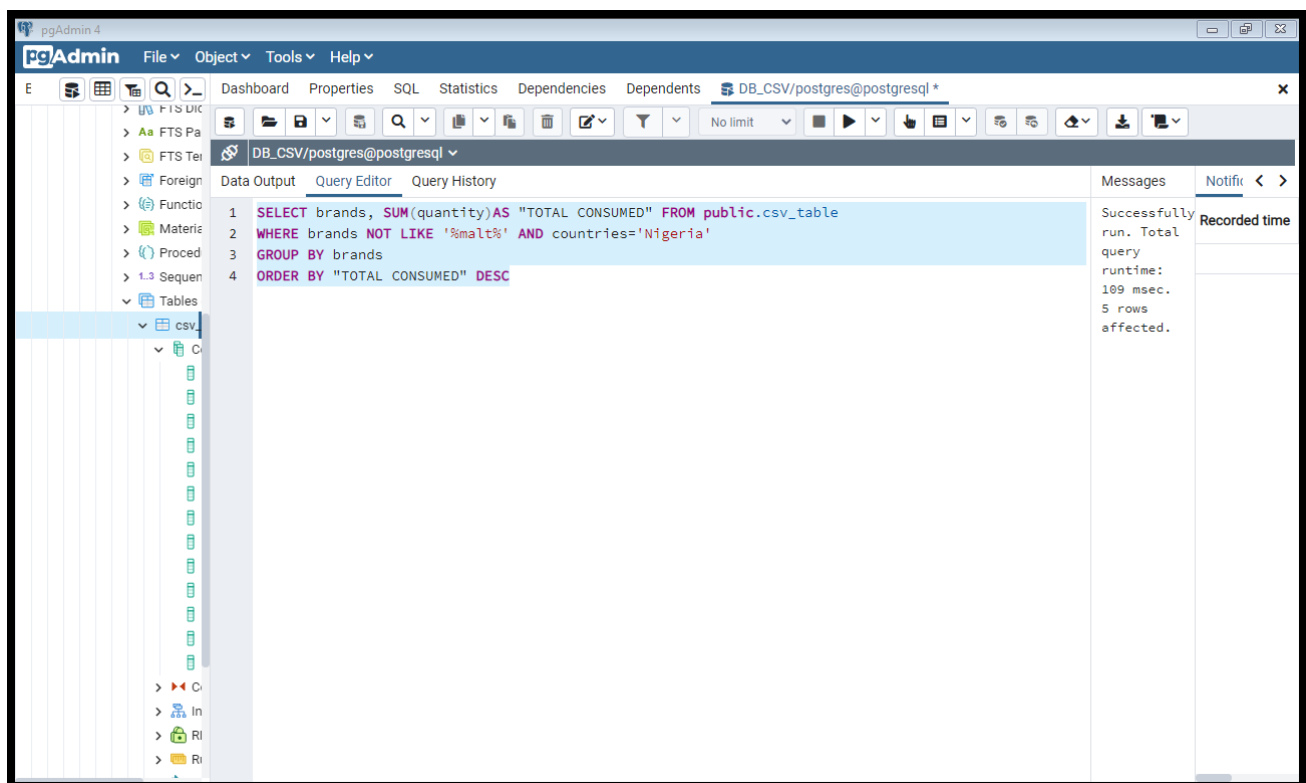


The screenshot shows the pgAdmin 4 interface with the query results displayed in the Data Output pane. The results are as follows:

brands	FAVORITE CONSUMED
eagle lager	4551
trophy	4468
hero	4456
budweiser	4328
castle lite	4287
beta malt	4257
grand malt	3914

From the result above, using the quantity consumed to determine the favorite brand, it can be deduced that the favorites brand in South-south region in Nigeria is **Eagle lager**.

QUESTION 7:



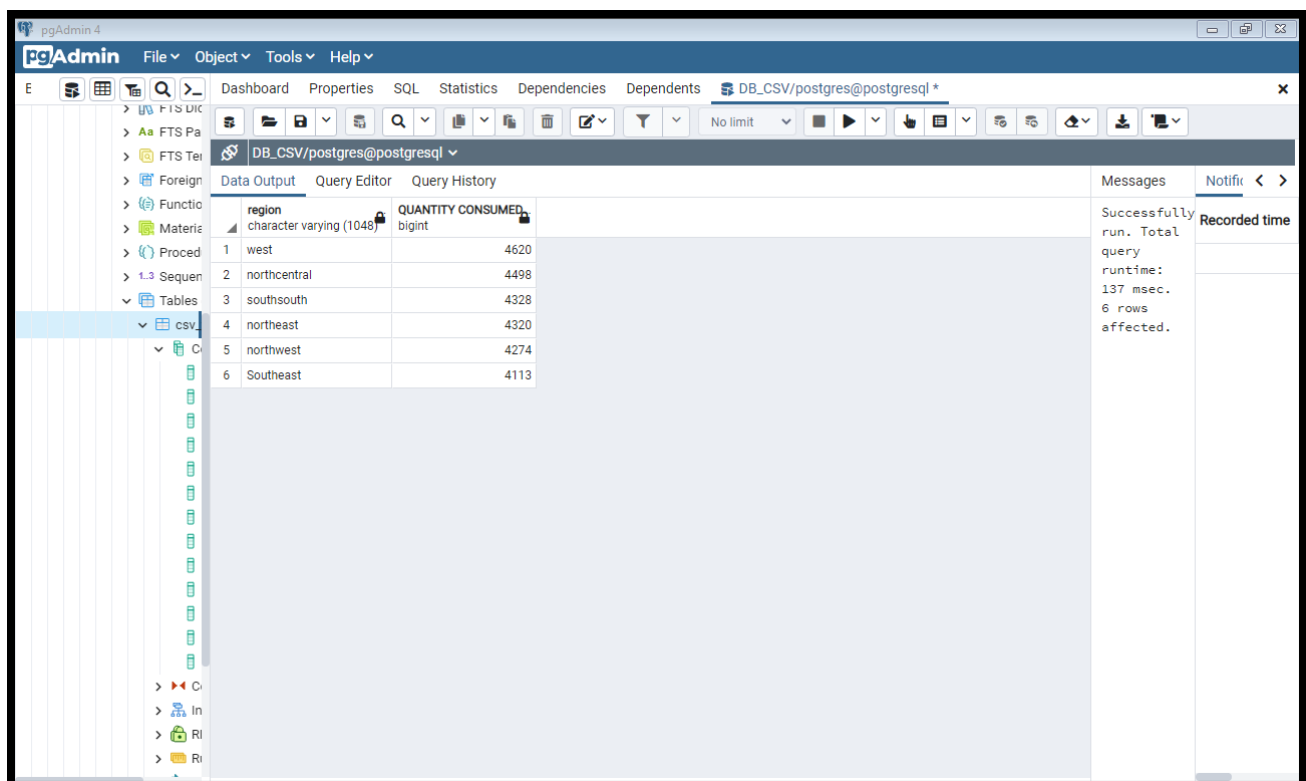
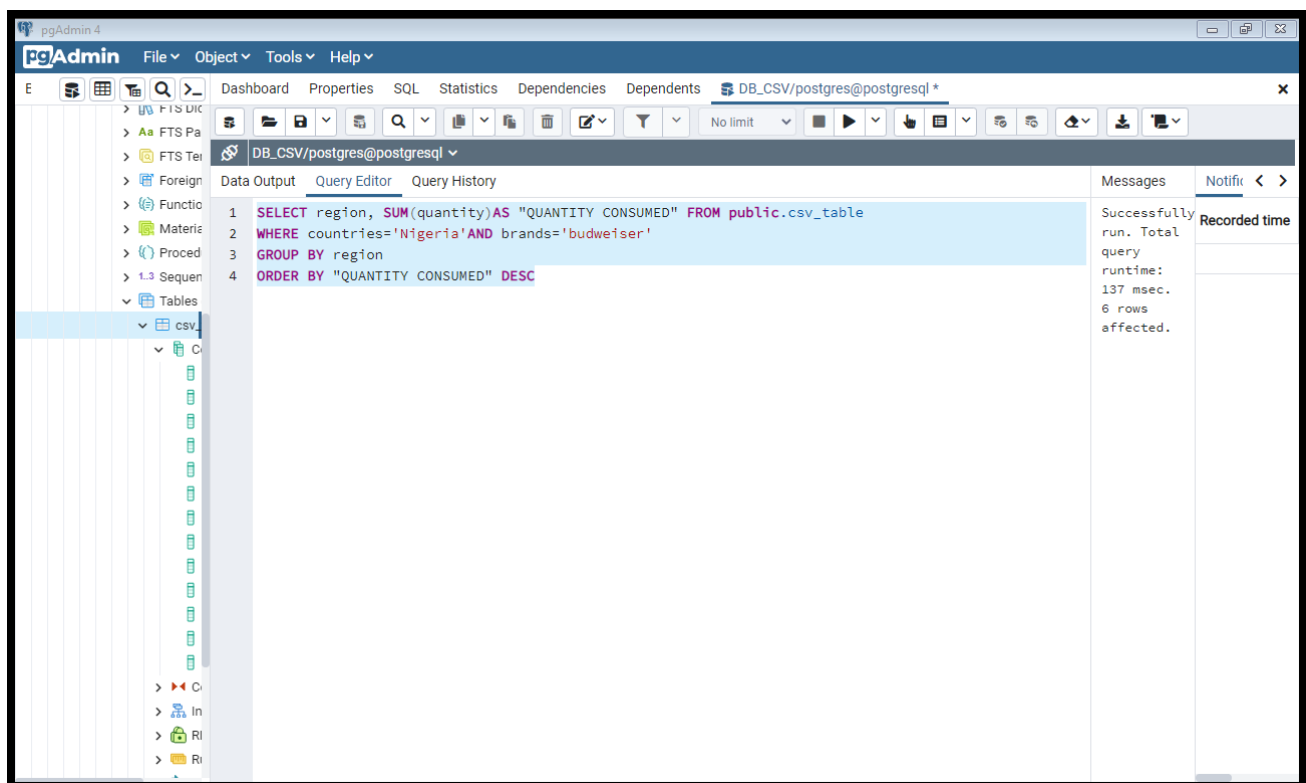
The screenshot shows the pgAdmin 4 interface with the query results displayed in the Data Output pane. The results are as follows:

brands	TOTAL CONSUMED
budweiser	26153
eagle lager	25872
hero	25811
trophy	25743
castle lite	25681

The Messages pane on the right indicates a successful query execution with a runtime of 109 msec and 5 rows affected.

The screenshot above shows the beer consumption in Nigeria and the total quantity of each brands consumed. **Budweiser** is the highest consumed beer followed by **Eagle lager**.

QUESTION 8:



The screenshot above shows the level of consumption of Budweiser in the regions in Nigeria. From the screenshot, it can be deduced that the **WEST** region of Nigeria is the highest consumption of Budweiser.

QUESTION 9:

The screenshot shows the pgAdmin 4 interface. In the Query Editor, the following SQL query is entered:

```

1 SELECT region, SUM(quantity) AS "TOTAL CONSUMED" FROM public.csv_table
2 WHERE countries='Nigeria' AND brands='budweiser' AND years=2019
3 GROUP BY region
4 ORDER BY "TOTAL CONSUMED" DESC
5

```

The Messages pane on the right indicates: "Successfully run. Total query runtime: 119 msec. 5 rows affected."

The screenshot shows the Data Output of the query. The results are as follows:

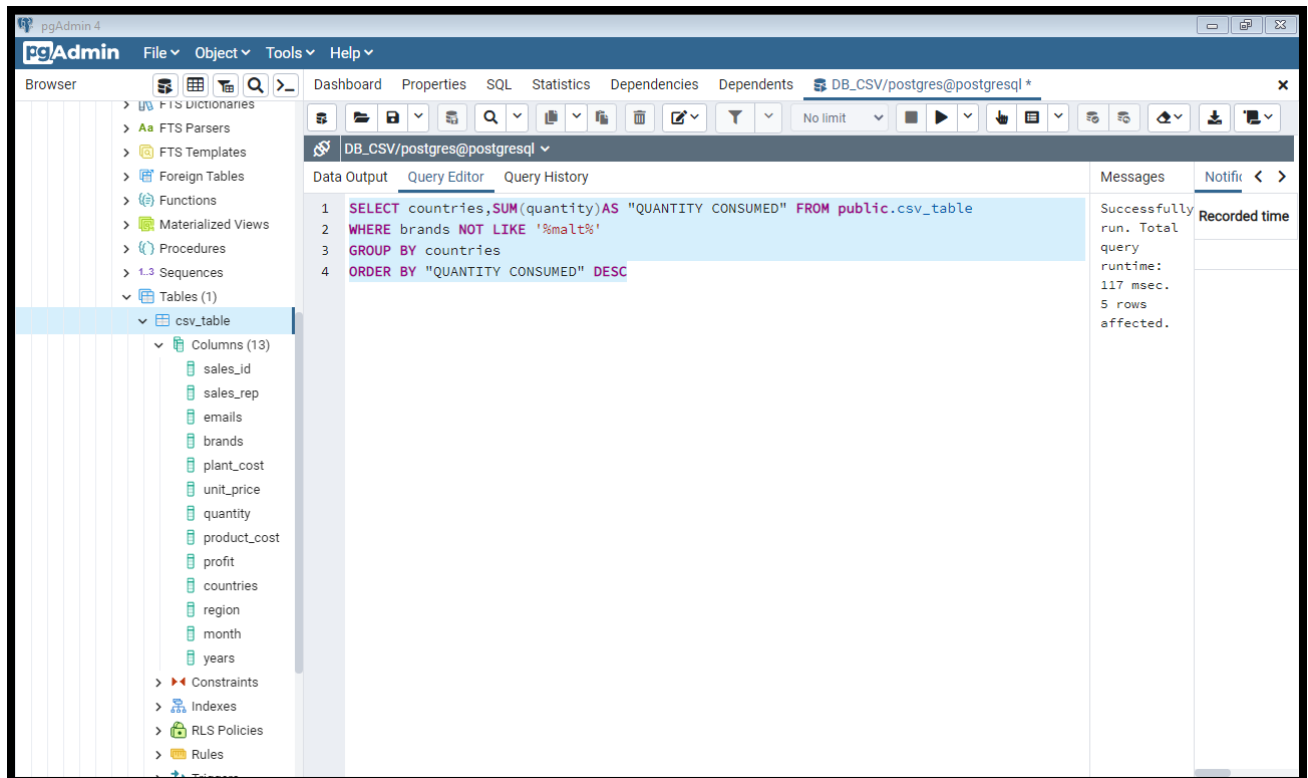
region	TOTAL CONSUMED
Southeast	1821
northeast	990
northwest	948
west	884
southsouth	847

The Messages pane on the right indicates: "Successfully run. Total query runtime: 119 msec. 5 rows affected."

From the screenshot above, it can be deduced that the level of consumption of Budweiser in Southwest increases and the region with the highest consumption is **SOUTHWEST**. This can be as a result of the promo in 2019.

SECTION C: COUNTRIES ANALYSIS

QUESTION 1:



The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with the 'csv_table' table selected under the 'Tables (1)' category. The main pane shows the 'Query Editor' with the following SQL query:

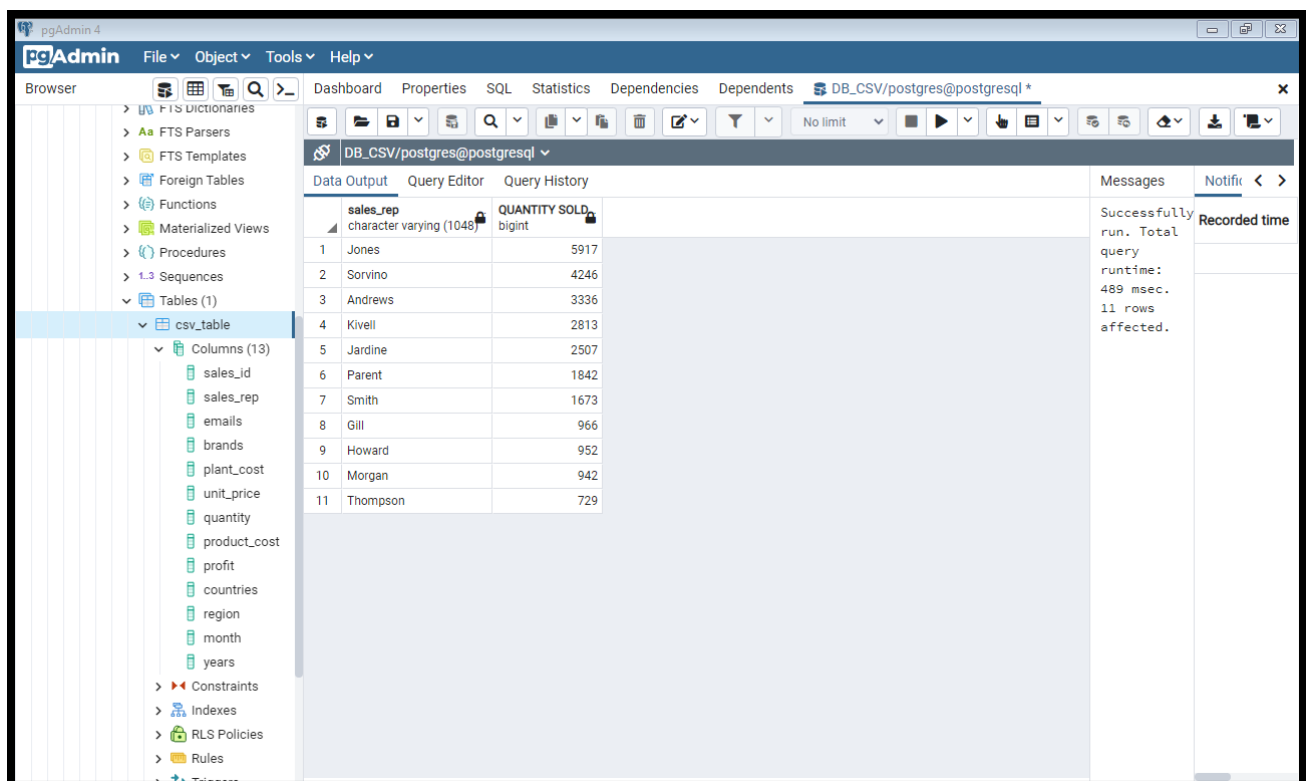
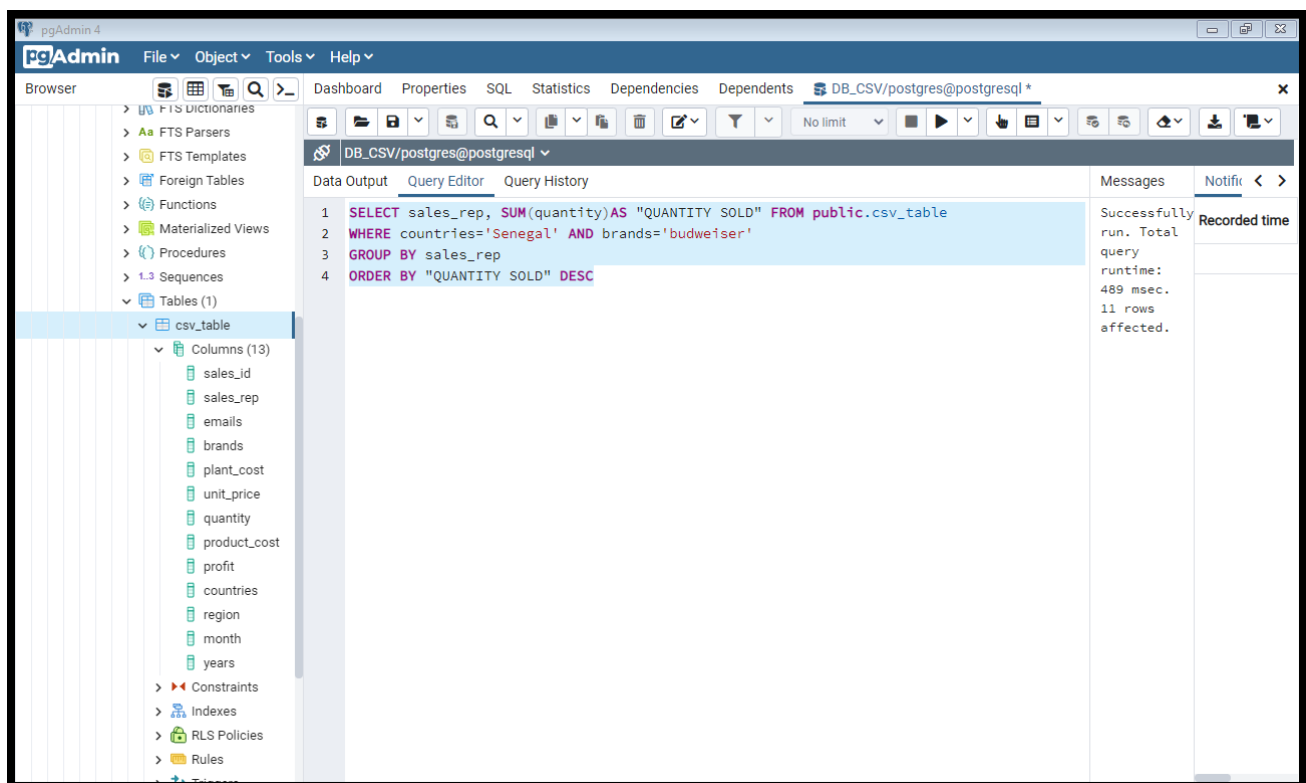
```
1 SELECT countries,SUM(quantity)AS "QUANTITY CONSUMED" FROM public.csv_table
2 WHERE brands NOT LIKE '%malt%'
3 GROUP BY countries
4 ORDER BY "QUANTITY CONSUMED" DESC
```

The 'Data Output' pane on the right shows the results of the query. The message pane indicates: 'Successfully run. Total query runtime: 117 msec. 5 rows affected.'

countries	QUANTITY CONSUMED
Senegal	129875
Nigeria	129260
Benin	127455
Ghana	127232
Togo	125548

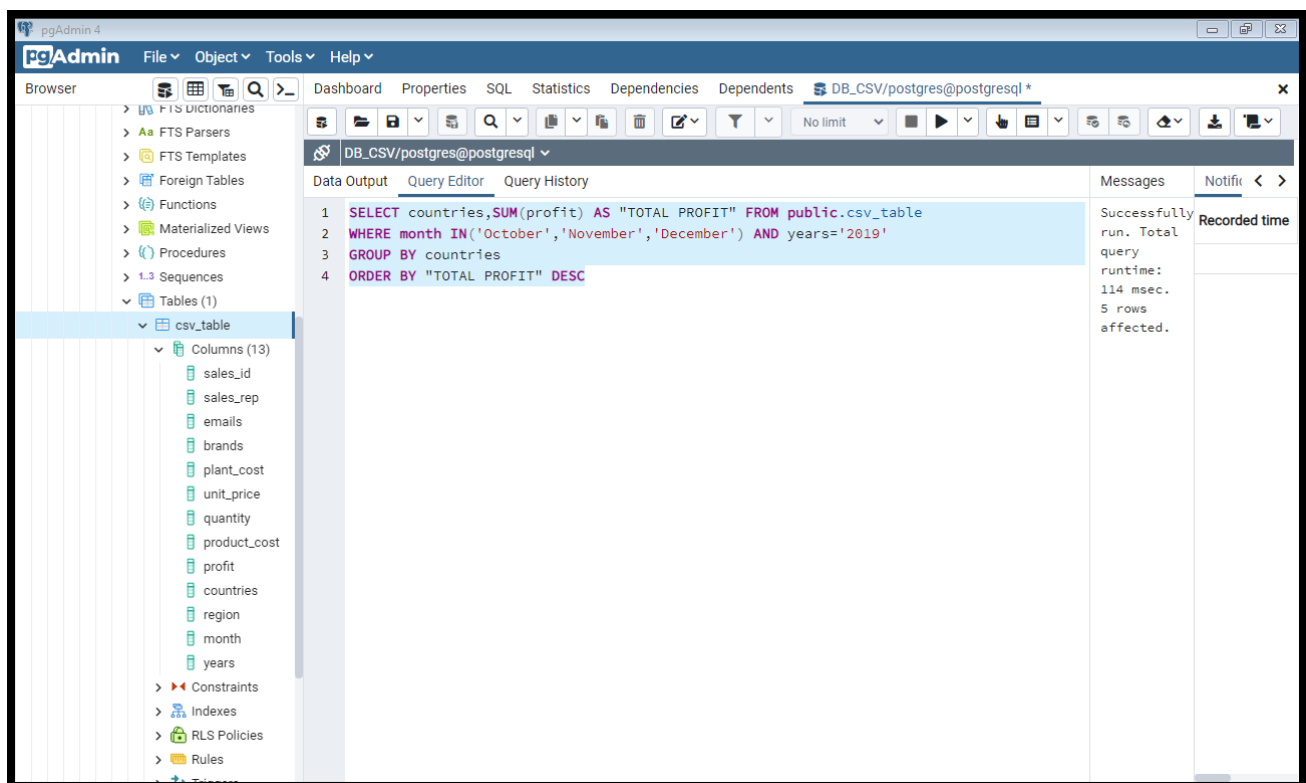
From the screenshot, the country with the highest consumption of beer is **SENEGAL**.

QUESTION 2:



From the Screenshot above it can be deduced that **JONES** is the Sales Personnel that Sold the highest quantity of Budweiser in Senegal.

QUESTION 3:

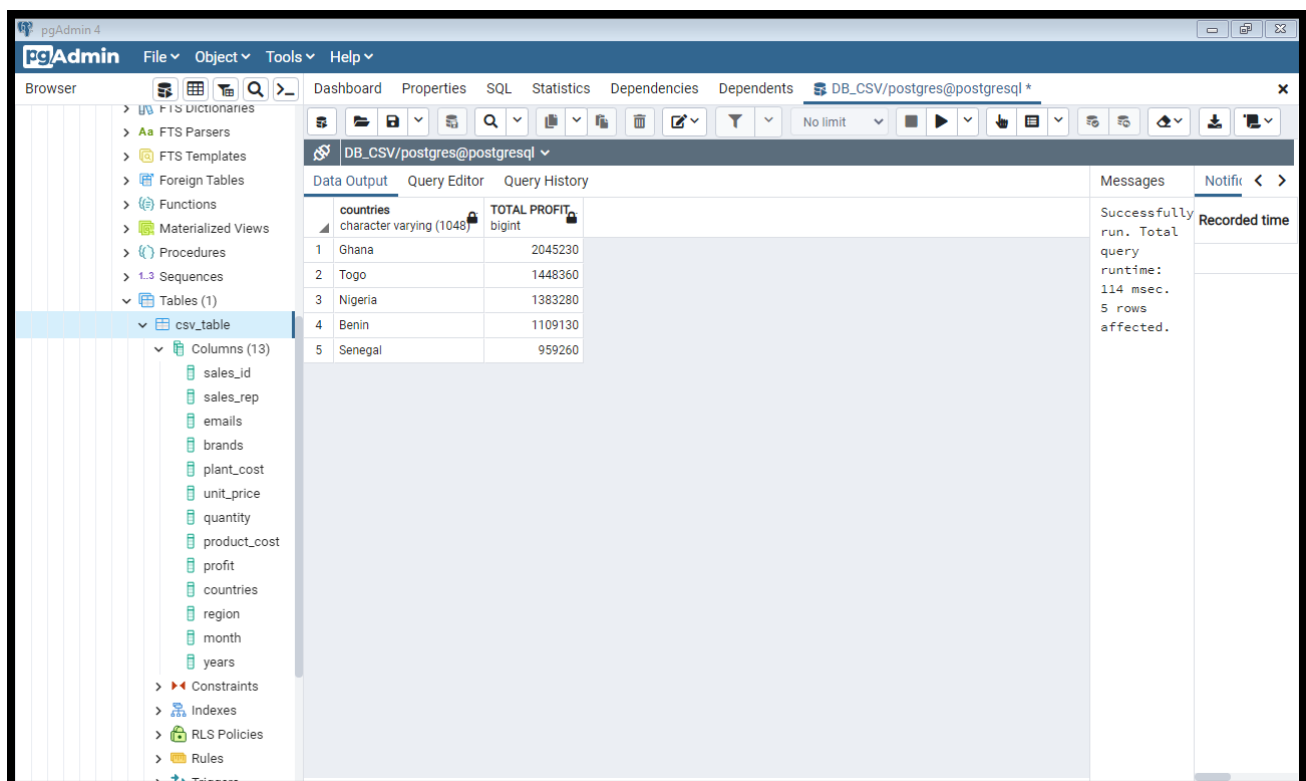


The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with 'csv_table' selected under 'Tables (1)'. The central pane shows the SQL query editor with the following query:

```
1 SELECT countries,SUM(profit) AS "TOTAL PROFIT" FROM public.csv_table
2 WHERE month IN('October','November','December') AND years='2019'
3 GROUP BY countries
4 ORDER BY "TOTAL PROFIT" DESC
```

The right pane shows the 'Messages' tab with the following output:

```
Successfully run. Total query runtime: 114 msec. 5 rows affected.
```



The screenshot shows the pgAdmin 4 interface with the same SQL query executed. The 'Data Output' tab is active, displaying the results in a table:

countries	TOTAL PROFIT
Ghana	2045230
Togo	1448360
Nigeria	1383280
Benin	1109130
Senegal	959260

The right pane shows the 'Messages' tab with the following output:

```
Successfully run. Total query runtime: 114 msec. 5 rows affected.
```

From the screenshot above, it can be deduced that **GHANA** has the highest profit in the fourth quarter in 2019 with a total profit of 2045230.

