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HW2
SELECT QUERY

1. Import data from banks all 2001:
create table banks(bank_id INT,bank_Date date,asset INT, liability INT)
(imported data using Import function at banks table)
Select * FROM public.banks

```
SELECT * FROM public.banks
LIMIT 100
```

Data Output | Explain | Messages | Notifications

	bank_id integer	bank_date date	asset integer	liability integer
1	23373	2001-09-30	90716	82518
2	23375	2001-03-31	221592	202713
3	23375	2001-06-30	236213	218446
4	23376	2001-12-31	79250	72170
5	23376	2001-03-31	72025	65682
6	23376	2001-06-30	72180	65576

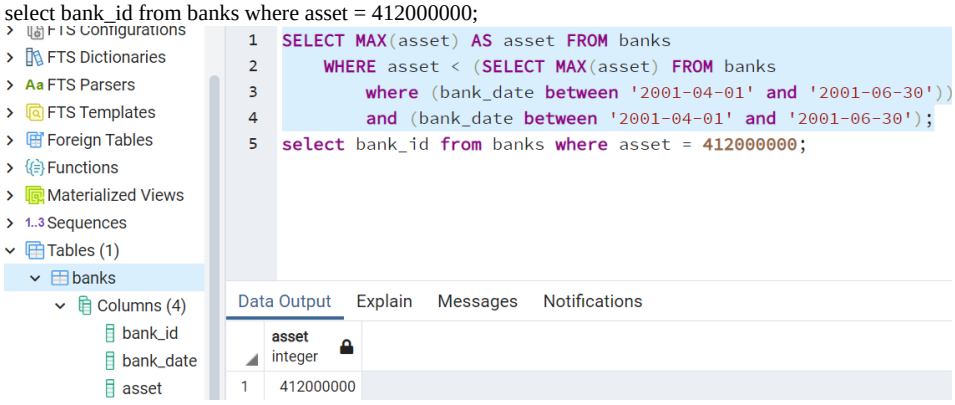
2. SELECT MAX(asset) AS asset FROM banks

WHERE asset < (SELECT MAX(asset) FROM banks

where (bank_date between '2001-04-01' and '2001-06-30'))

and (bank_date between '2001-04-01' and '2001-06-30');

select bank_id from banks where asset = 412000000;



```
5  select bank_id from banks where asset = 412000000;
```

Data Output | Explain | Messages | Notifications

	bank_id integer
1	628
2	628
3	628

3.

select extract(quarter from bank_date) as quarter, count (bank_id), bank_id from banks, extract (quarter from bank_date); order by extract(quarter from bank_date);

Commented [s1]: Syntax Error at Extract, but it works on 13.0.

4. select count(bank_id) from banks

where ((asset-liability)>asset * 0.1) and (bank_date between '2001-01-01' and '2001-03-31');

```
7  select count(bank_id) from banks
8  where ((asset-liability)>asset * 0.1) and (bank_date between '2001-01-01' and '2001-03-31');
```

Data Output | Explain | Messages | Notifications

	count bigint
1	13251

5. select avg(liability) from banks where (asset > (select AVG(asset) from banks where (bank_date between '2001-01-01' and '2001-03-31')));

```
10 select avg(liability) from banks where (asset > (select AVG(asset) from banks where (bank_date between '2001-01-01' and '2001-03-31')
```

Data Output | Explain | Messages | Notifications

	avg numeric
1	507541478130

Querying Multiple tables

1. create table banks02(bank_id INT,bank_Date date,asset INT, liability INT);
   select * from banks02;

```
create table banks02(bank_id INT,bank_Date date,asset INT, liability INT );
-- data imported using right click.
select * from banks02;
```

Data Output | Explain | Messages | Notifications

	bank_id integer	bank_date date	asset integer	liability integer
1	23373	2002-09-30	95914	87304
2	23376	2002-12-31	95937	87453
3	23376	2002-03-31	83335	75939

   create table secbank (bank_id INT,bank_Date date, security INT);
   select * from secbank;

```
create table secbank (bank_id INT,bank_Date date, security INT );
-- data imported using right click on table secbank.
select * from secbank;
```

Data Output | Explain | Messages | Notifications

	bank_id integer	bank_date date	security integer
1	32307	2002-09-30	0
2	22598	2002-03-31	0
3	15879	2002-06-30	5357

2. select B1.bank_id , B1.asset , B2.security From banks02 B1
   Inner Join secbank B2
   on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date
   where (B1.bank_date between '2002-01-01' and '2002-03-31') and (B2.security > B1.asset * 0.2)
   order by B1.bank_id;

```
select B1.bank_id , B1.asset , B2.security From banks02 B1
Inner Join secbank B2
on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date
where (B1.bank_date between '2002-01-01' and '2002-03-31') and (B2.security > B1.asset * 0.2) order by B1.bank_id;
```

Data Output | Explain | Messages | Notifications

	bank_id integer	asset integer	security integer
1	35	471056	106002
2	131	1250000	349389

select count(B1.bank_id) From banks02 B1

Inner Join secbank B2

on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date

where (B1.bank_date between '2002-01-01' and '2002-03-31')

and (B2.security > B1.asset * 0.2);

```
15  select count(B1.bank_id) From banks02 B1
16  Inner Join secbank B2
17  on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date
18  where (B1.bank_date between '2002-01-01' and '2002-03-31')
19  and (B2.security > B1.asset * 0.2);
```

Data Output | Explain | Messages | Notifications

	count bigint
1	984

3.

4. Similar error repeats

```
21  copy (select B1.bank_id , B1.asset , B2.security From banks02 B1
22  Inner Join secbank B2
23  on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date where (B1.bank_date between '2002-01-01' and '2002-03-31'
24  and (B2.security > (select AVG(security) from secbank where (bank_date between '2002-01-01' and '2002-03-31')))
25  order by B1.bank_id) To 'C:/Users/sishi/Documents/part2.csv' Delimiter ',' CSV Header;
26
27
```

Data Output | Explain | Messages | Notifications

```
ERROR:  could not open file "C:/Users/sishi/Documents/part2.csv" for writing: Permission denied
SQL state: 42501
```

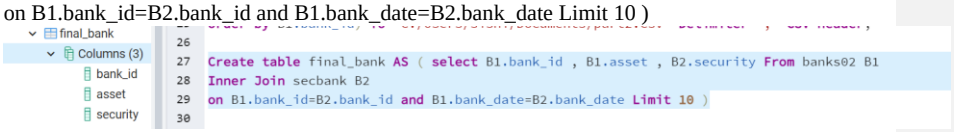
5. select B1.bank_id , B1.asset, B2.security From banks02 B1
Inner join secbank B2
on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date Limit 10;

```
27  select B1.bank_id , B1.asset, B2.security From banks02 B1
28  Inner join secbank B2
29  on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date Limit 10;
30
```

Data Output | Explain | Messages | Notifications

	bank_id integer	asset integer	security integer
1	32307	53714	0
2	22598	57360	0
3	15879	76960	5357
4	35373	46551	0

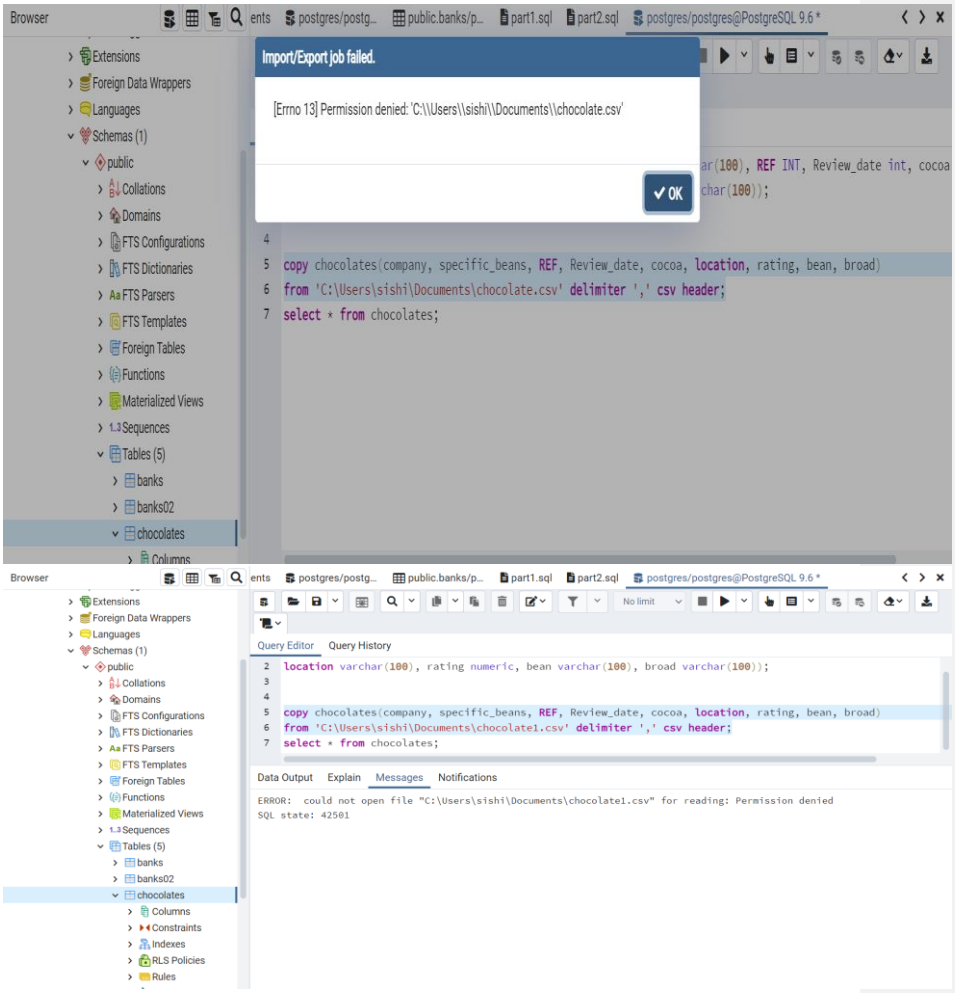
6. Create table final_bank AS (select B1.bank_id , B1.asset , B2.security From banks02 B1
Inner Join secbank B2
on B1.bank_id=B2.bank_id and B1.bank_date=B2.bank_date Limit 10)



Application

1. Impossible to solve this in any manner. I tried to extract using the code or by import/export b this problem I am not going to do.

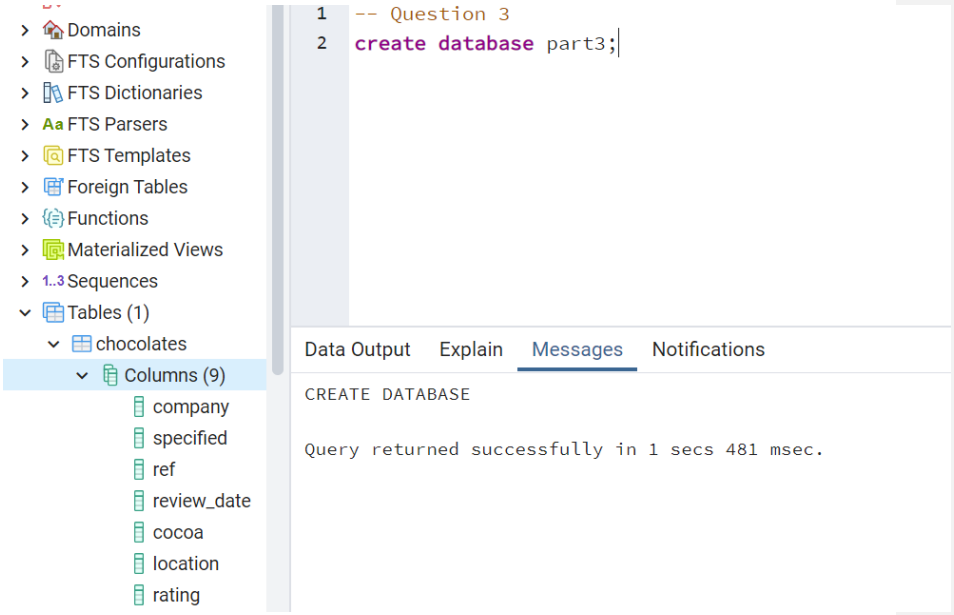
2.



HW_2_PART_3

Q3:-

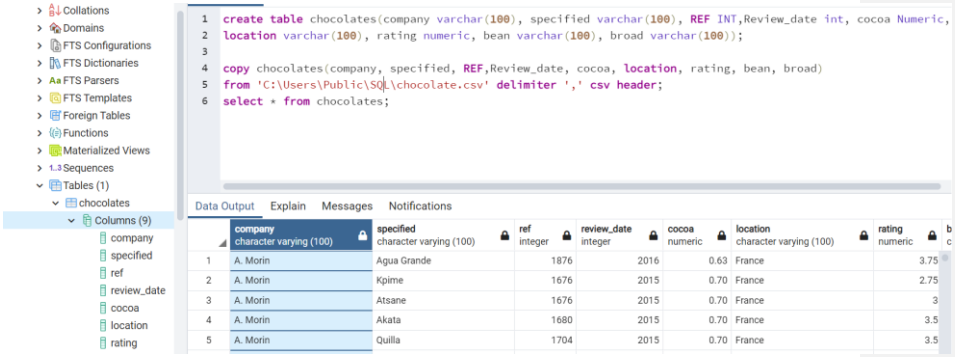
a. Create database part3;



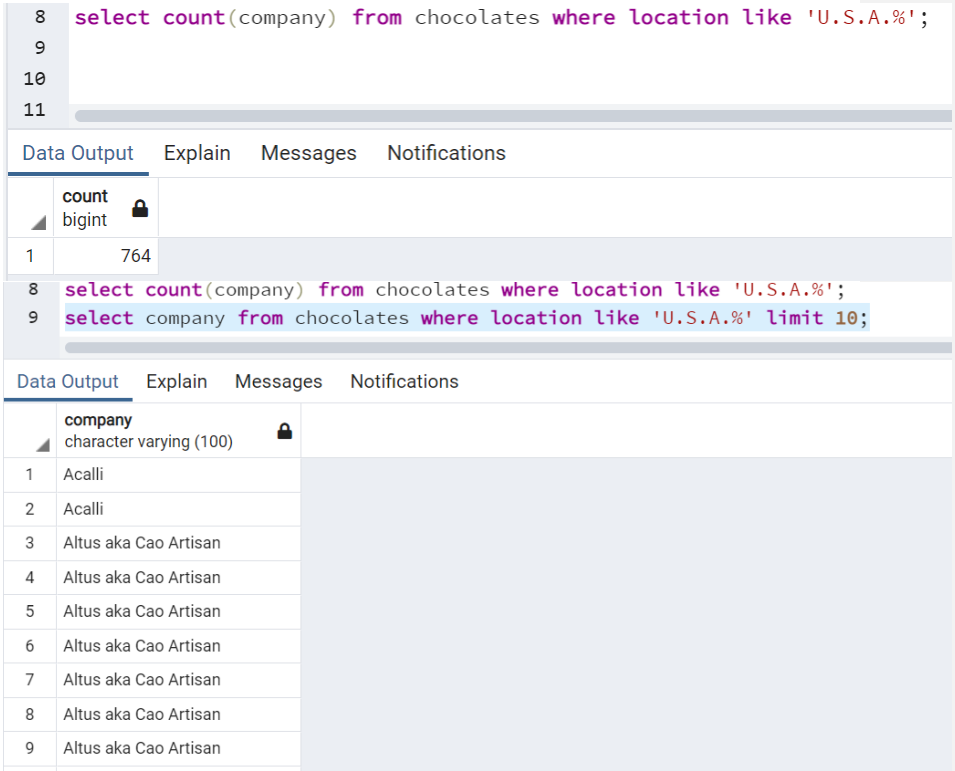
b.

create table chocolates(company varchar(100), specified varchar(100), REF INT,Review_date int, cocoa Numeric, location varchar(100), rating numeric, bean varchar(100), broad varchar(100));

copy chocolates(company, specified, REF,Review_date, cocoa, location, rating, bean, broad) from 'C:\Users\Public\SQL\chocolate.csv' delimiter ',' csv header;
select * from chocolates;



c. select count(company) from chocolates where location like 'U.S.A.%';
select company from chocolates where location like 'U.S.A.%' limit 10;



d. select count(company) from chocolates where location like 'U.S.A.%' and bean like 'Trinitario%';

select company from chocolates where location like 'U.S.A.%' and bean like 'Trinitario%'
limit 10;

```
11  select count(company) from chocolates where location like 'U.S.A.%' and bean like 'Trinitario%';
12
```

Data Output | Explain | Messages | Notifications

	count bigint
1	169

```
12  select company from chocolates where location like 'U.S.A.%' and bean like 'Trinitario%' limit 10;
```

Data Output | Explain | Messages | Notifications

	company character varying (100)
1	Altus aka Cao Artisan
2	Amano
3	Amano
4	Arete
5	Arete
6	Arete
7	Askinosie
8	Askinosie
9	Askinosie

e. select avg(rating) from chocolates Group by Review_date order by Review_date ASC;

```
14  select avg(rating) from chocolates Group by Review_date order by Review_date ASC;
15
16
17
```

Data Output | Explain | Messages | Notifications

	avg numeric
1	000000000000
2	376623376623
3	236559139785
4	707317073171
5	486486486486
6	606060606061
7	051282051282
8	108695652174
9	712550607287

f. select avg(rating) from chocolates Group by company order by company ASC limit 10;

```
16  select avg(rating) from chocolates Group by company order by company ASC limit 10;
```

Data Output | Explain | Messages | Notifications

	avg numeric
1	347826086957
2	000000000000
3	000000000000
4	000000000000
5	000000000000
6	333333333333
7	000000000000
8	000000000000
9	000000000000

4.Get the average rating for each year. Sort the result by year in ascending order and report your results.
5. Get the average rating for each company. Sort the result alphabetically by company name and report first 10 observations.
6. For each year, get the companies name and their average ratings whoseratings are above the every year's average rating. Report your results for year 2007.
7. For each year, get the highest rating and the company's name. Reportyour result in a table.
8. For each year, get the rating spread(highest minus lowest). Sort yourresult by spread in descending order and report it.