Project name :- Banking Management System

Group id - 24

Name: Darshi Desai

Id: 202112113

Name: Jeemi Thakkar

Id: 202112042

Name: Devam Panchasara

Id: 202112092

Name: Nisha Shah

Id: 202112125

Name: Sanjana Shah

Id: 202112033

TA: Jigar (202111011)

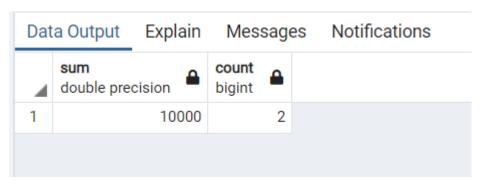
QUERIES:

- 1 count the total number of customers in the bank
- => SELECT COUNT(CUSTOMER_ID) FROM CUSTOMER

Dat	a Outp	ut	Explain	Messages	Notifications
4	count bigint	<u></u>			
1		10			

2- Find the sum of transaction where TRANSACTION_DATE='2018-12-20'

SUM(TRANSACTION_AMOUNT),COUNT(TRANSACTION_AMOUNT) FROM TRANSACTIONS WHERE TRANSACTION_DATE='2018-12-20'



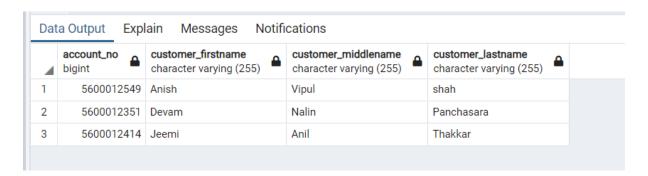
- 3 Display the list of customers of customers who opened their accounts in between 2020-21.
- => SELECT * FROM customer AS C JOIN ACCOUNT_DETAILS AS A ON(C.CUSTOMER_ID=A.CUSTOMER_ID) where extract (YEAR from DATE_OPENED) between 2020 and 2021;

4	account_no bigint	customer_firstname character varying (255) ▲	customer_middlename character varying (255)	customer_lastname character varying (255) ▲	date_opened date	account_status character varying (255) ▲	aadhar_card_number bigint	account_type character varying (255)
1	5600012574	Akshay	Haresh	Patel	2020-05-08	Active	134625879021	Fixed
2	5600012220	Aangi	Kamlesh	Shah	2020-10-19	Active	311475680000	Current
3	5600012351	Devam	Nalin	Panchasara	2020-05-17	Active	321465879021	Fixed
4	5600012111	Sanjana	Mahesh	shah	2020-12-01	Active	123455579021	Current
5	5600012351	Devam	Nalin	Panchasara	2020-04-10	Active	123456789012	Savings
6	5600012111	Sanjana	Mahesh	shah	2021-12-20	Active	132465978102	Savings

4 – Display the list of customers who have debit card.

=>SELECT

ACCOUNT_NO,CUSTOMER_FIRSTNAME,CUSTOMER_MIDDL ENAME,CUSTOMER_LASTNAME FROM CUSTOMER AS C JOIN CARDS AS CD ON(C.CUSTOMER_ID=CD.CUSTOMER_ID) WHERE CARD TYPE='Debit'



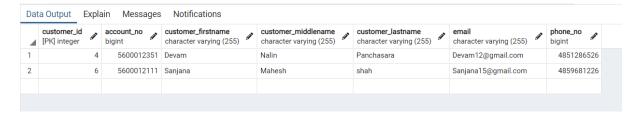
- 5 Display the list of customers who used their credit card in September 2021.
- =>SELECT * FROM TRANSACTIONS AS T JOIN
 ACCOUNT_DETAILS AS A
 ON(T.ACCOUNT_ID=A.ACCOUNT_ID) JOIN CUSTOMER AS C
 ON (C.CUSTOMER_ID=A.CUSTOMER_ID) WHERE extract
 (YEAR from TRANSACTION_DATE)=2021 AND extract
 (MONTH from TRANSACTION_DATE)=09 AND
 TRANSACTION_TYPE='CREDIT'

Da	a Output Expl	ain Messages	Notifications				
4	customer_id [PK] integer	account_no bigint	customer_firstname character varying (255)	customer_middlename character varying (255)	customer_lastname character varying (255)	email character varying (255)	phone_no bigint
1	7	5600012559	Drishti	Ankit	Desai	Drishti26@gmail.com	4859586726

6 – Retrieve the customer details who has an account more than one branch.

=>SELECT

C.CUSTOMER_ID,ACCOUNT_NO,CUSTOMER_FIRSTNAME,C
USTOMER_MIDDLENAME,CUSTOMER_LASTNAME,EMAIL,C
.PHONE_NO FROM CUSTOMER AS C JOIN
ACCOUNT_DETAILS AS A
ON(C.CUSTOMER_ID=A.CUSTOMER_ID) JOIN BRANCH AS B
ON(A.BRANCH_ID=B.BRANCH_ID) GROUP BY
C.CUSTOMER_ID HAVING COUNT(DISTINCT
A.BRANCH_ID)>1;



7 - COUNT TOTAL NO. OF ACCOUNT TYPES OF DIFF BRANCHES

=> SELECT

B.BRANCH_ID,B.BRANCH_NAME,ACCOUNT_TYPE,COUNT(
ACCOUNT_TYPE) FROM ACCOUNT_DETAILS AS A JOIN
BRANCH AS B ON(A.BRANCH_ID=B.BRANCH_ID) GROUP BY
ACCOUNT_TYPE,B.BRANCH_ID ORDER BY BRANCH_ID

4	branch_id integer	branch_name character varying (255)	account_type character varying (255) ▲	count bigint
1		BOB Adval	Current	2
2		BOB Adval	Fixed	1
3	2	BOB Ahmedabad	Current	1
4	2	BOB Ahmedabad	Fixed	1
5	2	BOB Ahmedabad	Savings	2
6	:	BOB Akhabarnagar	Fixed	1
7	3	BOB Akhabarnagar	Savings	2
8	4	BOB Ambawadi	Current	1
9	4	BOB Ambawadi	Fixed	1
10	4	BOB Ambawadi	Savings	1
11	Į	BOB JIVRAJ	Current	2

- 8 List the customer_id who have both savings & current account
- => select customer_id from ACCOUNT_DETAILS where ACCOUNT_TYPE='Savings' intersect select customer_id from ACCOUNT_DETAILS where ACCOUNT_TYPE='Current'

Dat	a Output Explain	Messages	Notifications
4	customer_id integer		
1	4		
2	6		

- 9 FIND THE MAXIMUM COUNT OF TRANSACTION DONE BY A CUSTOMER
- => SELECT COUNT(TRANSACTION_ID) AS
 TOTAL_TRANSACTION,CUSTOMER_FIRSTNAME,CUSTOME
 R_MIDDLENAME,CUSTOMER_LASTNAME FROM
 TRANSACTIONS AS T JOIN ACCOUNT_DETAILS AS A ON
 (T.ACCOUNT_ID=A.ACCOUNT_ID) JOIN CUSTOMER AS C
 ON(A.CUSTOMER_ID=C.CUSTOMER_ID) GROUP BY
 T.ACCOUNT_ID,C.CUSTOMER_ID ORDER BY
 COUNT(TRANSACTION_ID) DESC LIMIT 1

	tal_transaction gint	customer_firstname character varying (255)	customer_middlename character varying (255)	customer_lastname character varying (255)
1	3	Nisha	Rupesh	shah

10 - FIND THE MAXIMUM COUNT OF TRANSACTION DONE BY A CUSTOMER USING CHEQUE

=> SELECT

COUNT(TRANSACTION_ID),CUSTOMER_FIRSTNAME,CUSTO MER_MIDDLENAME,CUSTOMER_LASTNAME FROM TRANSACTIONS AS T JOIN ACCOUNT_DETAILS AS A ON (T.ACCOUNT_ID=A.ACCOUNT_ID) JOIN CUSTOMER AS C ON(A.CUSTOMER_ID=C.CUSTOMER_ID) WHERE TRANSACTION_TYPE='CHEQUE' GROUP BY T.ACCOUNT_ID,C.CUSTOMER_ID ORDER BY MAX(TRANSACTION_ID) DESC

Dat	a Output	Explain Messages	Notifications	
4	count bigint	customer_firstname character varying (255)	customer_middlename character varying (255)	customer_lastname character varying (255)
1	2	Nisha	Rupesh	shah
2	1	Jeemi	Anil	Thakkar

- 11- Write a query to display the customer's id, customer's firstname, account id and duration for people who have taken loans.
- => SELECT customer_id, customer_firstname,account_details.account_id, loan.duration FROM ((loan

INNER JOIN customer ON loan.customer_id=customer.customer_id)
INNER JOIN account_details ON
loan.account_id=account_details.account_id);

1 1 Anish 3 3 Years 2 2 Darshi 7 5 Years 3 3 Nisha 3 2 Years 4 5 Jeemi 14 1 Years 5 8 Akshay 7 10 Years	4	customer_id integer	customer_firstname character varying (255)	account_id bigint	duration character varying (255)
3	1	1	Anish	3	3 Years
4 5 Jeemi 14 1 Years	2	2	Darshi	7	5 Years
	3	3	Nisha	3	2 Years
5 8 Akshay 7 10 Years	4	5	Jeemi	14	1 Years
	5	8	Akshay	7	10 Years

12- Write a query to display the customer id, firstname, account_opened_date. Display in sorted order of date of account opened and within that sort by firstname.

=> SELECT

C.CUSTOMER_ID,C.CUSTOMER_FIRSTNAME,A.date_opened FROM Customer AS C JOIN ACCOUNT_DETAILS AS A ON(C.CUSTOMER_ID=A.CUSTOMER_ID)

ORDER BY EXTRACT(year FROM date_opened), c.customer_firstname ASC;

Data	Output Explai	n Messages Notifica	ntions
4	customer_id integer	customer_firstname character varying (255) ▲	date_opened date
1	4	Devam	2014-06-15
2	7	Drishti	2014-03-20
3	3	Nisha	2014-03-20
4	2	Darshi	2016-09-02
5	4	Devam	2016-02-21
6	10	Aesha	2018-10-20
7	1	Anish	2018-12-20
8	5	Jeemi	2018-10-19
9	6	Sanjana	2018-11-01
10	9	Aangi	2020-10-19
11	8	Akshay	2020-05-08
12	4	Devam	2020-05-17
13	4	Devam	2020-04-10
14	6	Sanjana	2020-12-01
15	6	Sanjana	2021-12-20

13- Write a query to display the customer id, customer firstname, account number for the customer's whose accounts were created after 15th date of any month.

=> SELECT account_details.customer_id,
customer.customer_firstname,
account_details.aadhar_card_number,account_details.date_opened
FROM account_details,customer

WHERE account_details.customer_id = customer.customer_id AND EXTRACT (day FROM date_opened)>15;

4	customer_id integer	customer_firstname character varying (255)	aadhar_card_number bigint	date_opened date
1	1	Anish	123456789012	2018-12-20
2	3	Nisha	321456879021	2014-03-20
3	5	Jeemi	311475680921	2018-10-19
4	7	Drishti	321456666021	2014-03-20
5	9	Aangi	311475680000	2020-10-19
6	10	Aesha	311465780921	2018-10-20
7	4	Devam	321465879021	2016-02-21
8	4	Devam	321465879021	2020-05-17
9	6	Sanjana	132465978102	2021-12-20

14 - write a query to dispplay the customer name who has highest balance

=> SELECT * FROM ACCOUNT_DETAILS GROUP BY ACCOUNT_ID HAVING AVL_BALANCE=(SELECT MAX(AVL BALANCE) FROM ACCOUNT DETAILS);

Da	ta Output	Exp	olain Messages	Notifications					
4	account_id [PK] bigint	G	date_opened date	account_status character varying (255)	aadhar_card_number bigint	avl_balance bigint	account_type character varying (255)	customer_id integer	branch_id integer
1		15	2021-12-20	Active	132465978102	10000	Savings	6	3

15 - FIND SUM OF TOTAL TOTAL_TRANSACTION_AMOUNT WHERE TRANSACTION MONTH 12/2021 AND 01/2021

=> SELECT SUM(TRANSACTION_AMOUNT) AS tOTAL_TRANSACTION_AMOUNT FROM TRANSACTIONS WHERE EXTRACT(YEAR FROM TRANSACTION_DATE)=2021 AND (EXTRACT(MONTH FROM TRANSACTION_DATE)=12 OR EXTRACT(MONTH FROM TRANSACTION_DATE)=01)

Dat	a Output	Explain	Messages	Notifications
4	total_trans	action_amou cision	unt 🖴	
1			6700	

16 - DISPLAY THE BRANCH_DETAILS WHO GIVES MAXIMUM LOANS

=> SELECT

A.BRANCH_ID,B.BRANCH_NAME,B.ADDRESS,B.PHONE_NO, B.IFSC_CODE FROM LOAN AS L JOIN ACCOUNT_DETAILS AS A ON(L.ACCOUNT_ID=A.ACCOUNT_ID) JOIN BRANCH AS B ON(A.BRANCH_ID=B.BRANCH_ID) GROUP BY A.BRANCH_ID,B.BRANCH_NAME,B.ADDRESS,B.PHONE_NO, B.IFSC_CODE ORDER BY COUNT(A.BRANCH_ID) DESC LIMIT 1

Da	ta Output Explain Messages Notifications							
4	branch_id integer		branch_name character varying (255)	2	address character varying (255)	<u></u>	phone_no bigint	ifsc_code character varying (255) ▲
1	2	2	BOB Ahmedabad		Post Box 101, Fuvara, Gandhi Road, Ahmedabad - 380001		4859685411	BARB0GANAHM