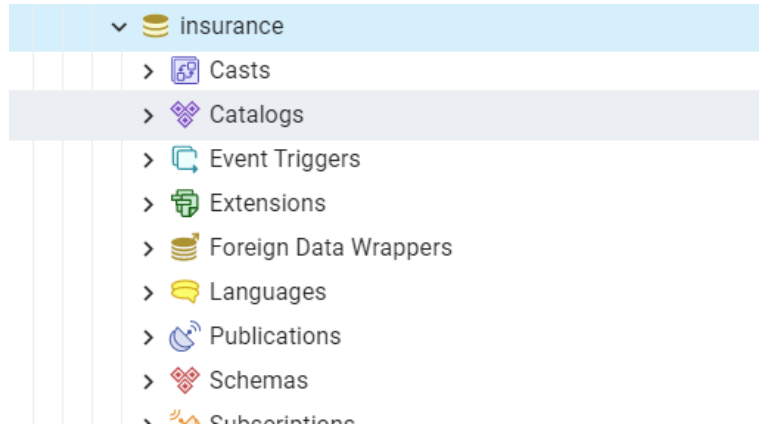


## Unit 5: SQL Mini Project

### GROUP 2

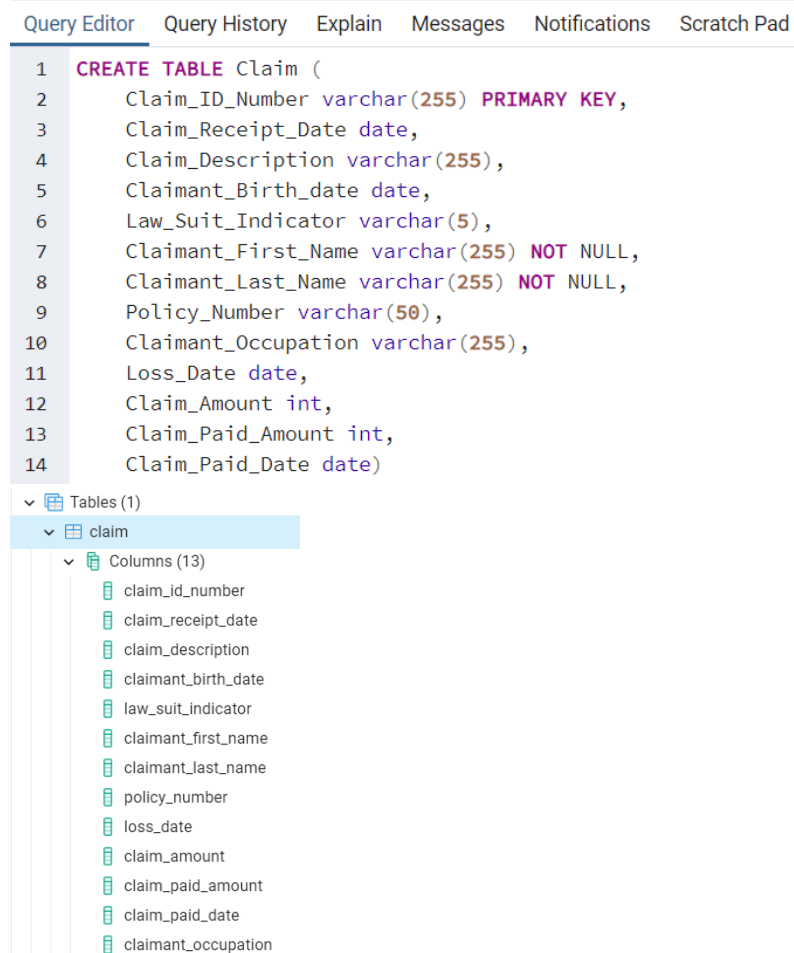
#### Create Insurance Database

```
1 CREATE DATABASE Insurance;
```



#### Create Insurance tables

##### 1. Create Claims Table




## Unit 5: SQL Mini Project


### GROUP 2














#### 2. Create Customer Table

[Query Editor](#) [Query History](#) [Explain](#) [Messages](#) [Notifications](#) [Scratch Pad](#)

```
1 CREATE TABLE customer(  
2     customer_id_number INT NOT NULL PRIMARY KEY,  
3     customer_first_name VARCHAR(50) NOT NULL,  
4     customer_last_name VARCHAR(50) NOT NULL,  
5     customer_type VARCHAR(50),  
6     business_name VARCHAR(50),  
7     Address_Street_Name_Line_One VARCHAR(50),  
8     Address_Street_Name_Line_Two VARCHAR(50),  
9     Address_City VARCHAR(50),  
10    Address_State VARCHAR(50),  
11    Address_Postal_Code INT,  
12    Address_Type VARCHAR(255),  
13    Customer_Birth_Date VARCHAR(50),  
14    Risk_Score INT)
```

▼  customer

▼  Columns (13)

-  customer\_id\_number
-  customer\_first\_name
-  customer\_last\_name
-  customer\_type
-  business\_name
-  address\_street\_name\_line\_one
-  address\_street\_name\_line\_two
-  address\_city
-  address\_state
-  address\_postal\_code
-  address\_type
-  customer\_birth\_date
-  risk\_score

#### 3. Create Policy Detail Table

```
CREATE TABLE policy_detail(  
    customer_id_number INT,  
    policy_number VARCHAR(50),  
    policy_effective_date date,  
    policy_expiration_date date,  
    policy_limit INT,  
    policy_type VARCHAR(255),  
    currency_type VARCHAR(10),  
    premium_cost INT);
```

## Unit 5: SQL Mini Project

### GROUP 2

▼	policy_detail
▼	Columns (8)
	customer_id_number
	policy_number
	policy_effective_date
	policy_expiration_date
	policy_limit
	policy_type
	currency_type
	premium_cost

#### 4. Create Reserves Table

	Query Editor	Query History	Explain	Me:
1	<b>CREATE TABLE</b> reserves(			
2	customer_id_number INT,			
3	policy_number VARCHAR(50),			
4	reserved_amount INT NOT NULL,			
5	reserved_date VARCHAR(50))			
▼	reserves			
▼	Columns (4)			
	customer_id_number			
	policy_number			
	reserved_amount			
	reserved_date			

## Unit 5: SQL Mini Project

### GROUP 2

Populate Insurance tables with sample data which you created in above step.

#### 1. Claim Table Data

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Data Output

Indicator	claimant_first_name	claimant_last_name	policy_number	claimant_occupation	loss_date	claim_amount	claim_paid_amount	claim_paid_date
character varying (5)	character varying (255)	character varying (255)	character varying (50)	character varying (255)	date	integer	integer	date
	Joe	Smith	P987654321	Physician	2020-12-04	5000	[null]	[null]

Query Editor Query History Explain Messages Notifications Scratch Pad

```
1 select*from claim
2
3 INSERT INTO claim(claim_id_number,claim_receipt_date,claim_description,claimant_birth_date,law_suit_indicator,claimant_first_name,
4 claimant_last_name,policy_number,claimant_occupation,loss_date,claim_amount)
5 VALUES ('C123450000','2020-12-05','Automobile accident','1975-08-01','N','Joe','Smith','P987654321','Physician','2020-12-04',5000)
```

insurance/postgres@PostgreSQL 13

Data Output

claim_id_number	claim_receipt_date	claim_description	claimant_birth_date	law_suit_indicator	claimant_first_name	claimant_last_name	policy_number	claimant_occupation	loss_date	claim_amount	claim_paid_amount	claim_paid_date
[PK] character varying (50)	date	character varying (255)	date	character (1)	character varying (255)	character varying (255)	character varying (50)	character varying (255)	date	integer	integer	date
C123450000	2020-12-05	Automobile accident	1975-08-01	N	Joe	Smith	P987654321	Physician	2020-12-04	5000	[null]	[null]
C123441000	2019-08-06	Automobile accident	1975-08-01	N	Joe	Smith	P987654321	Physician	2019-08-02	7600	7100	2019-09-05
C123440000	2020-10-15	Robbery	1986-03-20	N	Mary	Roberts	P987654111	Not provided	2020-10-01	25000	20000	2020-11-05
C345478900	2020-07-13	Property	1990-05-27	N	Aditya	Reddy	P987654222	Business Owner	2020-07-12	10000	8000	2020-08-12

Query Editor Query History Explain Messages Notifications Scratch Pad

```
1 select*from claim
2
3 INSERT INTO claim(claim_id_number,claim_receipt_date,claim_description,claimant_birth_date,law_suit_indicator,claimant_first_name,
4 claimant_last_name,policy_number,claimant_occupation,loss_date,claim_amount,claim_paid_amount,claim_paid_date)
5 VALUES ('C123441000','2019-08-06','Automobile accident','1975-08-01','N','Joe','Smith',
6 'P987654321','Physician','2019-08-02',7600,7100,'2019-09-05'),
7 ('C123440000','2020-10-15','Robbery','1986-03-20','N','Mary','Roberts',
8 'P987654111','Not provided','2020-10-01',25000,20000,'2020-11-05'),
9 ('C345478900','2020-07-13','Property','1990-05-27','N','Aditya','Reddy',
10 'P987654222','Business Owner','2020-07-12',10000,8000,'2020-08-12');
```

## Unit 5: SQL Mini Project

### GROUP 2

#### 2. Customer Table Data

insurance/postgres@PostgreSQL 13

Data Output

	customer_id_number [PK] integer	customer_first_name character varying (50)	customer_last_name character varying (50)	customer_type character varying (20)	business_name character varying (100)	address_street_name_line_one character varying (100)	address_street_name_line_two character varying (100)	address_city character varying (50)	address_state character varying (20)	address_postal_code integer	address_type character varying (20)	customer_birth_date character varying (10)	risk_score integer
1	777543325	Mary	Roberts	Individual	[null]	123 Main Street	[null]	Chicago	Illinois	60007	Residential	1986-03-20	75
2	777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27	70

Query Editor Query History Explain Messages Notifications Scratch Pad

```
1 SELECT * FROM customer
2
3 INSERT INTO customer (Customer_ID_Number, Customer_First_Name, Customer_Last_Name, Customer_Type, Address_Street_Name_Line_One,
4 Address_City, Address_State, Address_Postal_Code, Address_Type, Customer_Birth_Date, Risk_Score)
5 VALUES (777543325, 'Mary', 'Roberts', 'Individual', '123 Main Street', 'Chicago', 'Illinois', 60007, 'Residential', '1986-03-20', 75),
6 (777543800, 'Joe', 'Smith', 'Individual', '123 Park Avenue', 'New York', 'New York', 10017, 'Residential', '1963-02-27', 70)
```

insurance/postgres@PostgreSQL 13

Data Output

	customer_id_number [PK] integer	customer_first_name character varying (50)	customer_last_name character varying (50)	customer_type character varying (20)	business_name character varying (100)	address_street_name_line_one character varying (100)	address_street_name_line_two character varying (100)	address_city character varying (50)	address_state character varying (20)	address_postal_code integer	address_type character varying (20)	customer_birth_date character varying (10)	risk_score integer
1	777543325	Mary	Roberts	Individual	[null]	123 Main Street	[null]	Chicago	Illinois	60007	Residential	1986-03-20	75
2	777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27	70
3	776983401	Aditya	Reddy	Business	ABC Systems	222 Hyde Street	Floor 2	San Francisco	California	94123	Business	[null]	50

Query Editor Query History Explain Messages Notifications Scratch Pad

```
1 SELECT * FROM customer
2
3 INSERT INTO customer (Customer_ID_Number, Customer_First_Name, Customer_Last_Name, Customer_Type, Business_Name, Address_Street_Name_Line_One,
4 Address_Street_Name_Line_Two, Address_City, Address_State, Address_Postal_Code, Address_Type, Risk_Score)
5 VALUES ('776983401', 'Aditya', 'Reddy', 'Business', 'ABC Systems', '222 Hyde Street', 'Floor 2', 'San Francisco', 'California',
6 '94123', 'Business', '50');
```

## Unit 5: SQL Mini Project

### GROUP 2

#### 3. Policy Detail Table Data

Data Output									
	customer_id_number integer	policy_number character varying (50)	policy_effective_date date	policy_expiration_date date	policy_limit integer	policy_type character varying (255)	currency_type character varying (10)	premium_cost integer	
1	777543800	P987654321	2020-02-11	2021-02-11	500000	Automobile	USD	2600	
2	777543800	P987654321	2019-02-11	2020-02-11	500000	Automobile	USD	2300	
3	777543800	P987654321	2018-02-11	2018-02-11	500000	Automobile	USD	2150	
4	777543800	P987654321	2017-02-11	2018-02-11	500000	Automobile	USD	2100	
5	777543325	P987654111	2020-03-15	2021-03-15	5000000	Excess/Umbrella	USD	5500	
6	776983401	P987654222	2020-06-15	2020-06-15	3000000	Property	USD	10000	

Query Editor   Query History   Explain   Messages   Notifications   Scratch Pad

```
1 select*from policy_detail
2
3 INSERT INTO policy_detail (customer_id_number,policy_number,policy_effective_date,policy_expiration_date,
4 policy_limit,policy_type,currency_type,premium_cost)
5 VALUES (777543800, 'P987654321', '2020-02-11', '2021-02-11', 500000,'Automobile','USD',2600),
6 (777543800, 'P987654321', '2019-02-11', '2020-02-11', 500000, 'Automobile', 'USD', 2300),
7 (777543800, 'P987654321', '2018-02-11', '2018-02-11', 500000, 'Automobile', 'USD', 2150),
8 (777543800, 'P987654321', '2017-02-11', '2018-02-11', 500000, 'Automobile', 'USD', 2100),
9 (777543325, 'P987654111', '2020-03-15', '2021-03-15', 5000000, 'Excess/Umbrella', 'USD', 5500),
10 (776983401, 'P987654222', '2020-06-15', '2020-06-15', 3000000, 'Property', 'USD', 10000)
11
```

#### 4. Reserves Table Data

Data Output					
	customer_id_number integer	policy_number character varying (50)	reserved_amount integer	reserved_date character varying (50)	
1	777543325	P987654111	5000	2020-03-15	
2	776983401	P987654222	7000	2020-06-15	
3	777543800	P987654321	1500	2017-02-11	
4	777543800	P987654321	1500	2018-02-11	

Query Editor   Query History   Explain   Messages   Notifications   Scratch Pad

```
1 select*from reserves
2
3 INSERT INTO reserves(customer_id_number,policy_number,reserved_amount,reserved_date)
4 VALUES (777543325, 'P987654111', 5000, '2020-03-15'),
5 (776983401, 'P987654222', 7000, '2020-06-15'),
6 (777543800, 'P987654321', 1500, '2017-02-11'),
7 (777543800, 'P987654321', 1500, '2018-02-11')
```

## Unit 5: SQL Mini Project

### GROUP 2

Form any 5 SQL to extract information from tables. Use Join, Where, Other conditional operators.

1. Inner join customer and policy\_detail tables:

SELECT\*FROM customer inner join policy\_detail on

customer.customer\_id\_number=policy\_detail.customer\_id\_number

insurance/postgres@PostgreSQL 13

Data Output

	customer_id_number	customer_first_name	customer_last_name	customer_type	business_name	address_street_na	address_street	address_city	address_state	address_zip	address_type	customer_id_number
	integer	character varying (50)	character varying (50)	character varying (50)	character varying (50)	character varying (50)	character varying (50)	character varying (50)	character varying (50)	integer	character varying (50)	integer
1	777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27
2	777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27
3	777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27
4	777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27
5	777543325	Mary	Roberts	Individual	[null]	123 Main Street	[null]	Chicago	Illinois	60007	Residential	1986-03-20
6	776983401	Aditya	Reddy	Business	ABC Systems	222 Hyde Street	Floor 2	San Francisco	California	94123	Business	[null]

Query Editor

Query History

Explain

Messages

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Scratch Pad

1 SELECT\*FROM customer inner join policy\_detail on customer.customer\_id\_number=policy\_detail.customer\_id\_number

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Data Output

id	address_street_na	address_street	address_city	address_state	address_zip	address_type	customer_id_number	risk_score	customer_id_number	policy_number	policy_effective_date	policy_expiration_date	policy_limit	policy_type	currency_type	premium_cost
1	New York	New York	10017	Residential	1963-02-27	70	777543800	P987654321	2020-02-11	2021-02-11	500000	Automobile	USD	2600		
2	New York	New York	10017	Residential	1963-02-27	70	777543800	P987654321	2019-02-11	2020-02-11	500000	Automobile	USD	2300		
3	New York	New York	10017	Residential	1963-02-27	70	777543800	P987654321	2018-02-11	2018-02-11	500000	Automobile	USD	2150		
4	New York	New York	10017	Residential	1963-02-27	70	777543800	P987654321	2017-02-11	2018-02-11	500000	Automobile	USD	2100		
5	Chicago	Illinois	60007	Residential	1986-03-20	75	777543325	P987654111	2020-03-15	2021-03-15	5000000	Excess/Umbrella	USD	5500		
6	San Francisco	California	94123	Business	[null]	50	776983401	P987654222	2020-06-15	2020-06-15	3000000	Property	USD	10000		

Query Editor

Query History

Explain

Messages

Notifications

Scratch Pad

1 SELECT\*FROM customer inner join policy\_detail on customer.customer\_id\_number=policy\_detail.customer\_id\_number

2. Full outer join claim and customer tables

SELECT\*FROM claim full outer join customer on

claim.claimant\_first\_name=customer.customer\_first\_name

insurance/postgres@PostgreSQL 13

Data Output

	claim_id_number	claim_receipt_date	claim_description	claimant_birth_date	law_suit	claimant_first_name	claimant_last_name	policy_number	claimant_occurrence	loss_date	claim_amount	claim_paid_amount	claim_paid_date	customer_id_number
	character varying (50)	date	character varying (255)	date	character varying (50)	character varying (50)	character varying (50)	character varying (50)	character varying (50)	date	integer	integer	date	integer
1	C123440000	2020-10-15	Robbery	1986-03-20	N	Mary	Roberts	P987654111	Not provided	2020-10-01	25000	20000	2020-11-05	777543325
2	C123441000	2019-08-06	Automobile accident	1975-08-01	N	Joe	Smith	P987654321	Physician	2019-08-02	7600	7100	2019-09-05	777543800
3	C123450000	2020-12-05	Automobile accident	1975-08-01	N	Joe	Smith	P987654321	Physician	2020-12-04	5000	[null]	[null]	777543800
4	C345478900	2020-07-13	Property	1990-05-27	N	Aditya	Reddy	P987654222	Business Own	2020-07-12	10000	8000	2020-08-12	776983401

## Unit 5: SQL Mini Project

### GROUP 2

insurance/postgres@PostgreSQL 13

Data Output

customer_id_number	customer_first_name	customer_last_name	customer_type	business_name	address_street_name	address_street_number	address_city	address_state	address_postal_code	address_type	customer_birth_date	risk_score
777543325	Mary	Roberts	Individual	[null]	123 Main Street	[null]	Chicago	Illinois	60007	Residential	1986-03-20	75
777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27	70
777543800	Joe	Smith	Individual	[null]	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27	70
776983401	Aditya	Reddy	Business	ABC Systems	222 Hyde Street	Floor 2	San Francisco	California	94123	Business	[null]	50

### 3. Show customers whose risk score is over 50

```
SELECT * FROM customer
WHERE risk_score>50;
```

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Data Output

	customer_id_number [PK] integer	customer_first_name character varying (50)	customer_last_name character varying (50)	customer_type character varying (50)	address_street_name character varying (100)	address_street_number character varying (10)	address_city character varying (100)	address_state character varying (100)	address_postal_code integer	address_type character varying (50)	customer_birth_date character varying (10)	risk_score integer
1	777543325	Mary	Roberts	Individual	123 Main Street	[null]	Chicago	Illinois	60007	Residential	1986-03-20	75
2	777543800	Joe	Smith	Individual	123 Park Avenue	[null]	New York	New York	10017	Residential	1963-02-27	70

### 4. Show customers that have a reserved amount of 1500

```
SELECT customer_id_number,policy_number,reserved_date
FROM reserves
WHERE reserved_amount = 1500;
```

insurance/postgres@PostgreSQL 13

Data Output

	<div>customer_id_number</div> <div>integer</div>	<div>policy_number</div> <div>character varying (50)</div>	<div>reserved_date</div> <div>character varying (50)</div>	
1	777543800	P987654321	2017-02-11	
2	777543800	P987654321	2018-02-11	

Query Editor

```
1 SELECT customer_id_number,policy_number,reserved_date
2 FROM reserves
3 WHERE reserved_amount = 1500;
```



## Unit 5: SQL Mini Project

### GROUP 2

5. Update claim paid amount to 4000 in rows where the claim amount is 5000

UPDATE claim

SET claim\_paid\_amount = '4000'

WHERE claim\_amount = '5000';

insurance/postgres@PostgreSQL 13

Data Output

	claim_id_number [PK] character varying (255)	claim_receipt_date	claim_description character varying (255)	claimant_birth_date	law_suit character	claimant character	claimant character	policy_number character varying (255)	claimant_occurrence character varying (255)	loss_date date	claim_amount integer	claim_paid_amount integer	claim_paid_date date
1	C123441000	2019-08-06	Automobile accident	1975-08-01	N	Joe	Smith	P987654321	Physician	2019-08-02	7600	7100	2019-09-05
2	C123440000	2020-10-15	Robbery	1986-03-20	N	Mary	Roberts	P987654111	Not provided	2020-10-01	25000	20000	2020-11-05
3	C345478900	2020-07-13	Property	1990-05-27	N	Aditya	Reddy	P987654222	Business Owner	2020-07-12	10000	8000	2020-08-12
4	C123450000	2020-12-05	Automobile accident	1975-08-01	N	Joe	Smith	P987654321	Physician	2020-12-04	5000	4000	[null]

Query Editor   Query History   Explain   Messages   Notifications   Scratch Pad

```
1 select * from claim
2
3 UPDATE claim
4 SET claim_paid_amount = '4000'
5 WHERE claim_amount = '5000';
```