

```
SELECT DISTINCT g.FullName, s.Description, s.Cost  
FROM Service s  
JOIN Booking b ON s.BookingID = b.BookingID  
JOIN Guest g ON b.GuestID = g.GuestID  
WHERE s.Cost > 30;
```

er | Object | Tools | Edit | View | Window | Help

Branch B – Secondary Database/postgres@PostgreSQL 15

Query

```
126
127
128 SELECT b.BookingID, g.FullName, rt.TypeName, rt.PricePerM
129 FROM Booking b
130 JOIN Guest g ON b.GuestID = g.GuestID
131 JOIN Room r ON b.RoomID = r.RoomID
132 JOIN RoomType rt ON r.RoomTypeID = rt.RoomTypeID
133 LEFT JOIN Service s ON b.BookingID = s.BookingID
134 GROUP BY b.BookingID, g.FullName, rt.TypeName, rt.PricePe
135
136
137
```

Query History

Scratch Pad

Branch B – Secondary Database/postgres@PostgreSQL 15

Query

```
143 AND r.Status <> 'Available';
144
145
146
147 SELECT DISTINCT g.FullName, s.Description, s.Cost
148 FROM Service s
149 JOIN Booking b ON s.BookingID = b.BookingID
150 JOIN Guest g ON b.GuestID = g.GuestID
151 WHERE s.Cost > 30;
152
153 CREATE OR REPLACE VIEW HotelRevenuePerMonth AS
154 SELECT DATE_TRUNC('month', PaymentDate) AS Month,
```

Query History

Scratch Pad

Data Output

Showing rows: 1 to 1 | Page No: 1 of 1

fullname	description	cost
character varying (100)	character varying (100)	numeric (10,2)
1 Eric Nsengiyumva	Spa	50.00

Object Explorer

- Views
 - Subscription
 - Branch V – Sec
 - Casts
 - Catalogs
 - Event Triggers
 - Extensions
 - Foreign Data
 - Languages
 - Publications
 - Schemas
 - Subscription
 - BranchDB_A
 - Casts
 - Catalogs
 - Event Triggers
- CAT_1_SCRIPT
- Casts
- Catalogs
- Event Triggers

The screenshot displays a PostgreSQL IDE interface with two queries. The top query is a SELECT statement that joins several tables to retrieve booking information. The bottom query is a PL/pgSQL function named prevent_overlap() that inserts booking records and raises an error if a room is already booked for the same dates.

Query 1 (Top):

```
126
127
128 SELECT b.BookingID, g.FullName, rt.TypeName, rt.PricePerN
129 FROM Booking b
130 JOIN Guest g ON b.GuestID = g.GuestID
131 JOIN Room r ON b.RoomID = r.RoomID
132 JOIN RoomType rt ON r.RoomTypeID = rt.RoomTypeID
133 LEFT JOIN Service s ON b.BookingID = s.BookingID
134 GROUP BY b.BookingID, g.FullName, rt.TypeName, rt.PricePe
135
136
137
```

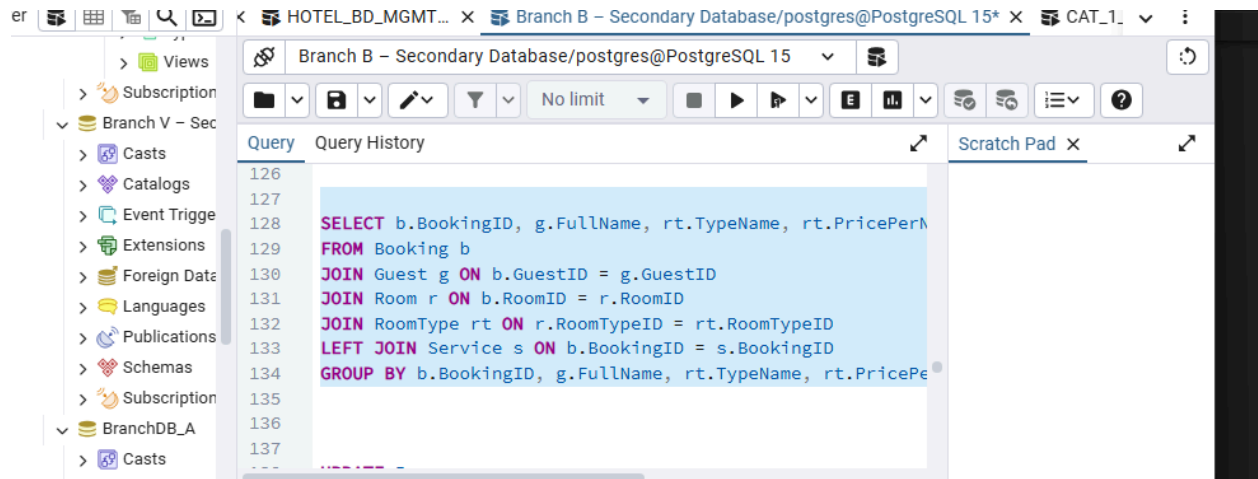
Query 2 (Bottom):

```
180 FOR EACH ROW EXECUTE FUNCTION prevent_overlap();
181
182
183
184 -- This will work (no overlap)
185 INSERT INTO Booking (GuestID, RoomID, CheckInDate, CheckC
186 VALUES (1, 1, '2025-11-01', '2025-11-05', 'Booked');
187
188 -- This will fail (overlaps with previous booking)
189 INSERT INTO Booking (GuestID, RoomID, CheckInDate, CheckC
190 VALUES (2, 1, '2025-11-03', '2025-11-06', 'Booked');
191
```

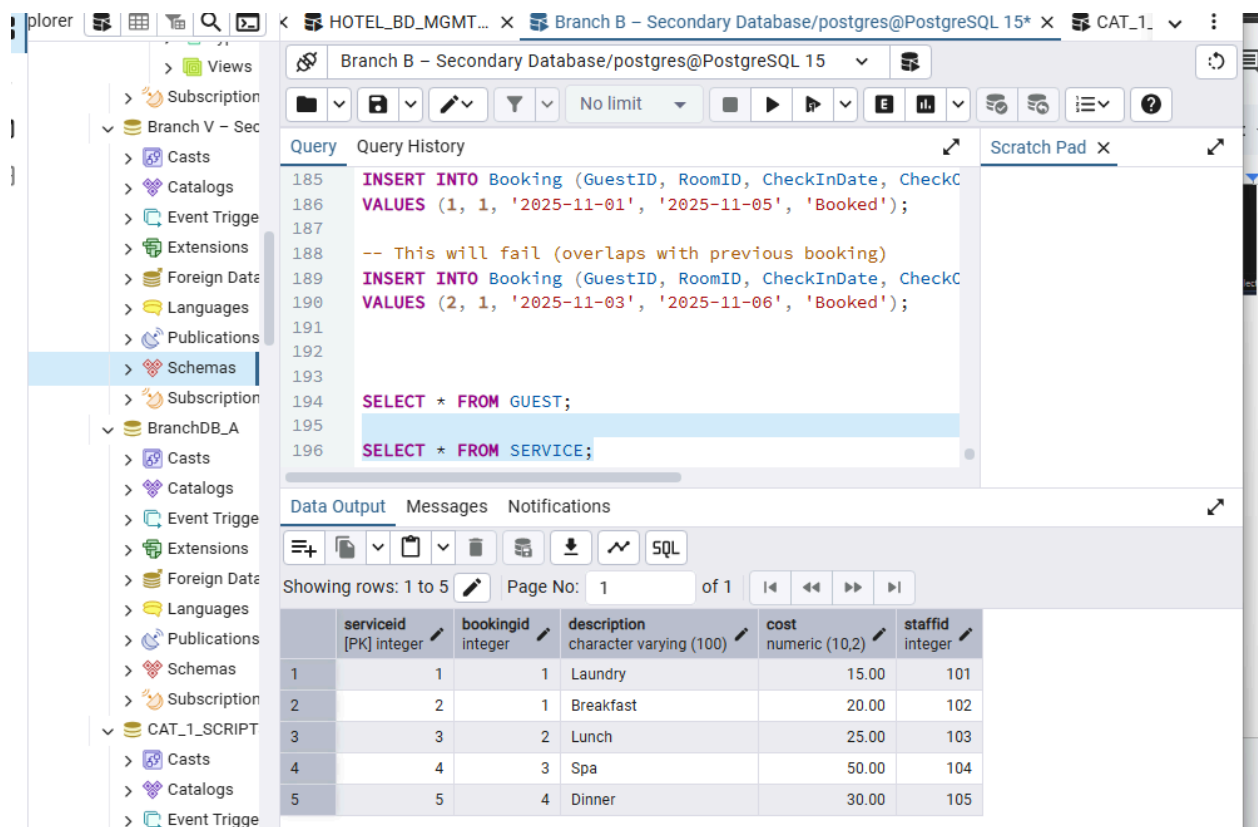
Error Message:

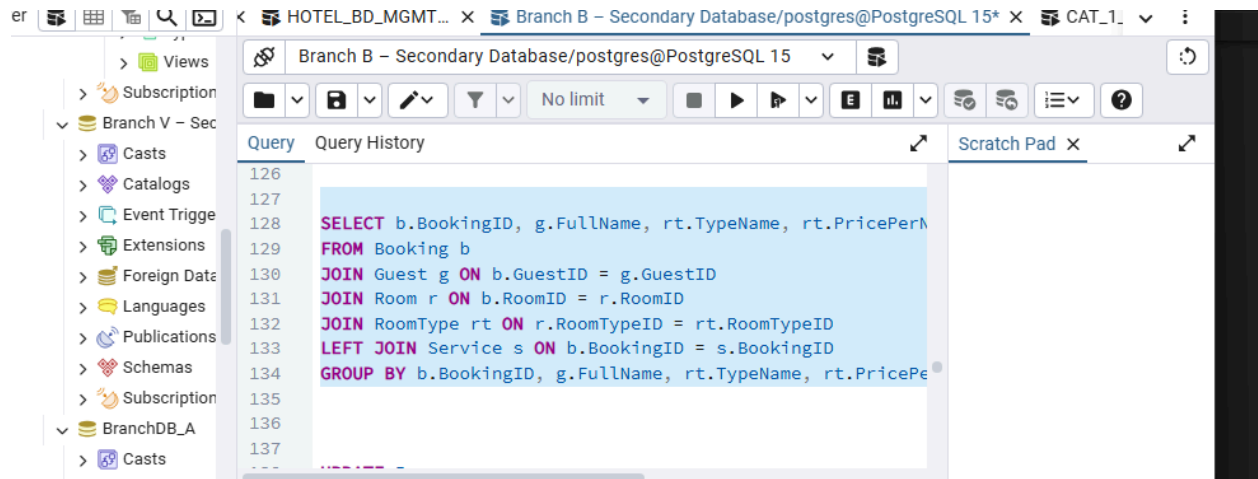
```
ERROR: Room 1 is already booked for these dates.
CONTEXT: PL/pgSQL function prevent_overlap() line 10 at RAISE
SQL state: P0001
```

SELECT * FROM GUEST;

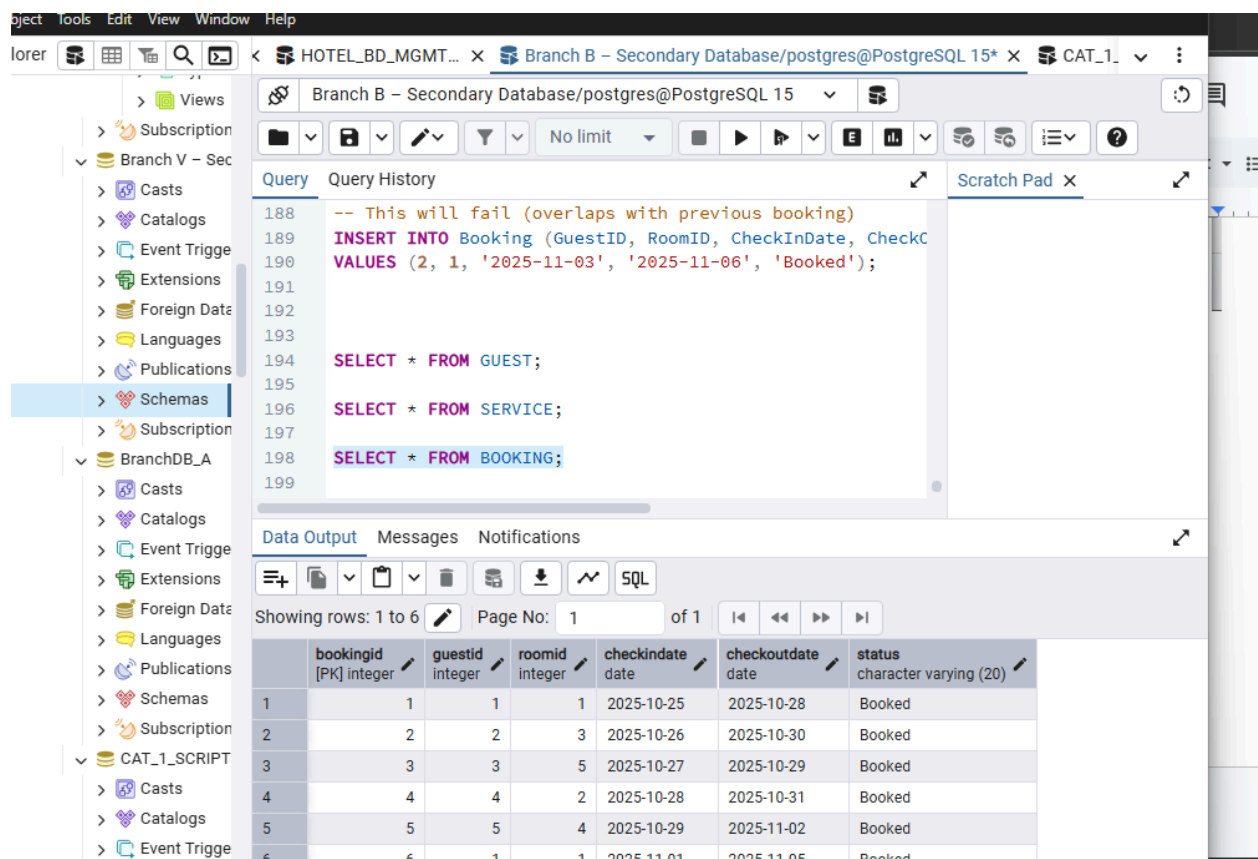


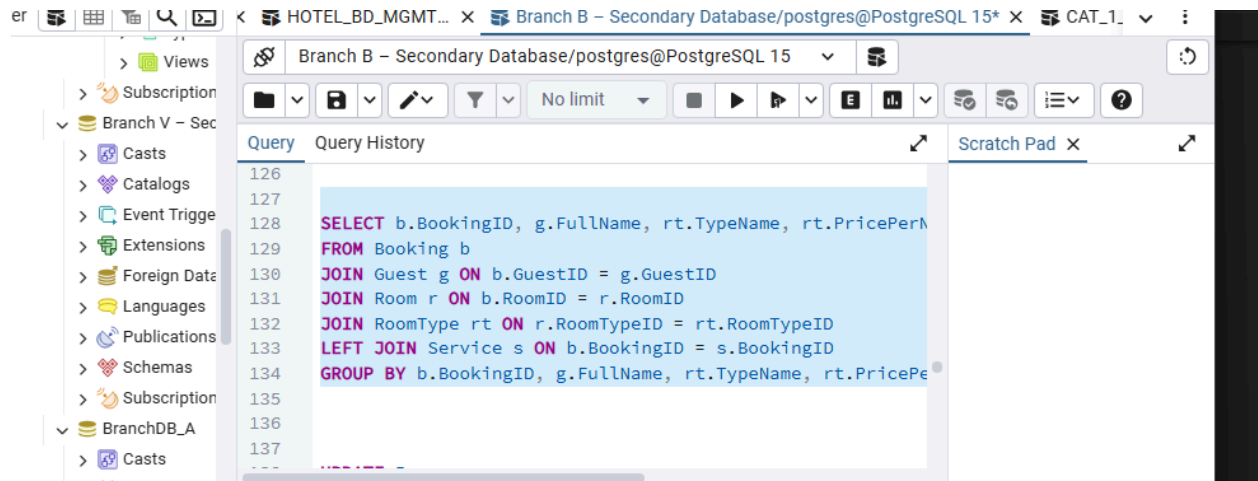
SELECT * FROM SERVICE;





SELECT * FROM BOOKING;





SELECT * FROM PAYMENT;

er

HOTEL_BD_MGMT... x Branch B – Secondary Database/postgres@PostgreSQL 15* x CAT_1_ v

Branch B – Secondary Database/postgres@PostgreSQL 15

Query Query History Scratch Pad x

```

126
127
128 SELECT b.BookingID, g.FullName, rt.TypeName, rt.PricePerN
129 FROM Booking b
130 JOIN Guest g ON b.GuestID = g.GuestID
131 JOIN Room r ON b.RoomID = r.RoomID
132 JOIN RoomType rt ON r.RoomTypeID = rt.RoomTypeID
133 LEFT JOIN Service s ON b.BookingID = s.BookingID
134 GROUP BY b.BookingID, g.FullName, rt.TypeName, rt.PricePe
135
136
137

```

HOTEL_BD_MGMT... x Branch B – Secondary Database/postgres@PostgreSQL 15* x CAT_1_ v

Branch B – Secondary Database/postgres@PostgreSQL 15

Query Query History Scratch Pad x

```

190 VALUES (2, 1, '2025-11-03', '2025-11-06', 'Booked');
191
192
193
194 SELECT * FROM GUEST;
195
196 SELECT * FROM SERVICE;
197
198 SELECT * FROM BOOKING;
199
200 SELECT * FROM PAYMENT;
201

```

Data Output Messages Notifications

Showing rows: 1 to 5 Page No: 1 of 1

	paymentid [PK] integer	bookingid integer	amount numeric (10,2)	paymentdate date	method character varying (50)
1	1	1	185.00	2025-10-28	Credit Card
2	2	2	205.00	2025-10-30	Cash
3	3	3	200.00	2025-10-29	Credit Card
4	4	4	110.00	2025-10-31	Mobile Money
5	5	5	150.00	2025-11-02	Cash

SELECT * FROM ROOM;

er HOTEL BD_MGMT... Branch B – Secondary Database/postgres@PostgreSQL 15* CAT_1_

Branch B – Secondary Database/postgres@PostgreSQL 15

Query Query History Scratch Pad

```
126
127
128 SELECT b.BookingID, g.FullName, rt.TypeName, rt.PricePerM
129 FROM Booking b
130 JOIN Guest g ON b.GuestID = g.GuestID
131 JOIN Room r ON b.RoomID = r.RoomID
132 JOIN RoomType rt ON r.RoomTypeID = rt.RoomTypeID
133 LEFT JOIN Service s ON b.BookingID = s.BookingID
134 GROUP BY b.BookingID, g.FullName, rt.TypeName, rt.PricePe
135
136
137
```

Tools Edit View Window Help

HOTEL BD_MGMT... Branch B – Secondary Database/postgres@PostgreSQL 15* CAT_1_

Branch B – Secondary Database/postgres@PostgreSQL 15

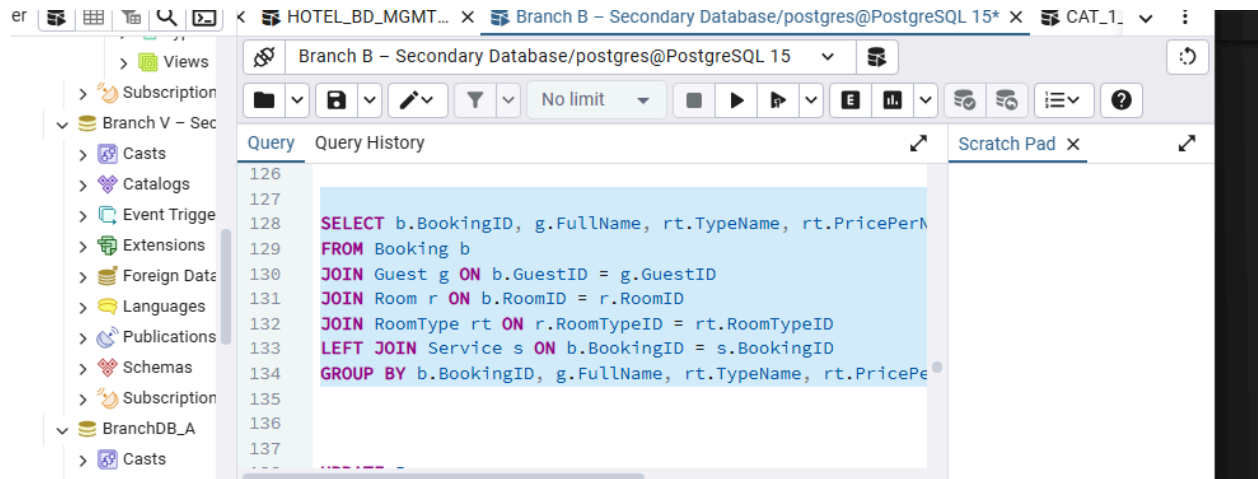
Query Query History Scratch Pad

```
191
192
193
194 SELECT * FROM GUEST;
195
```

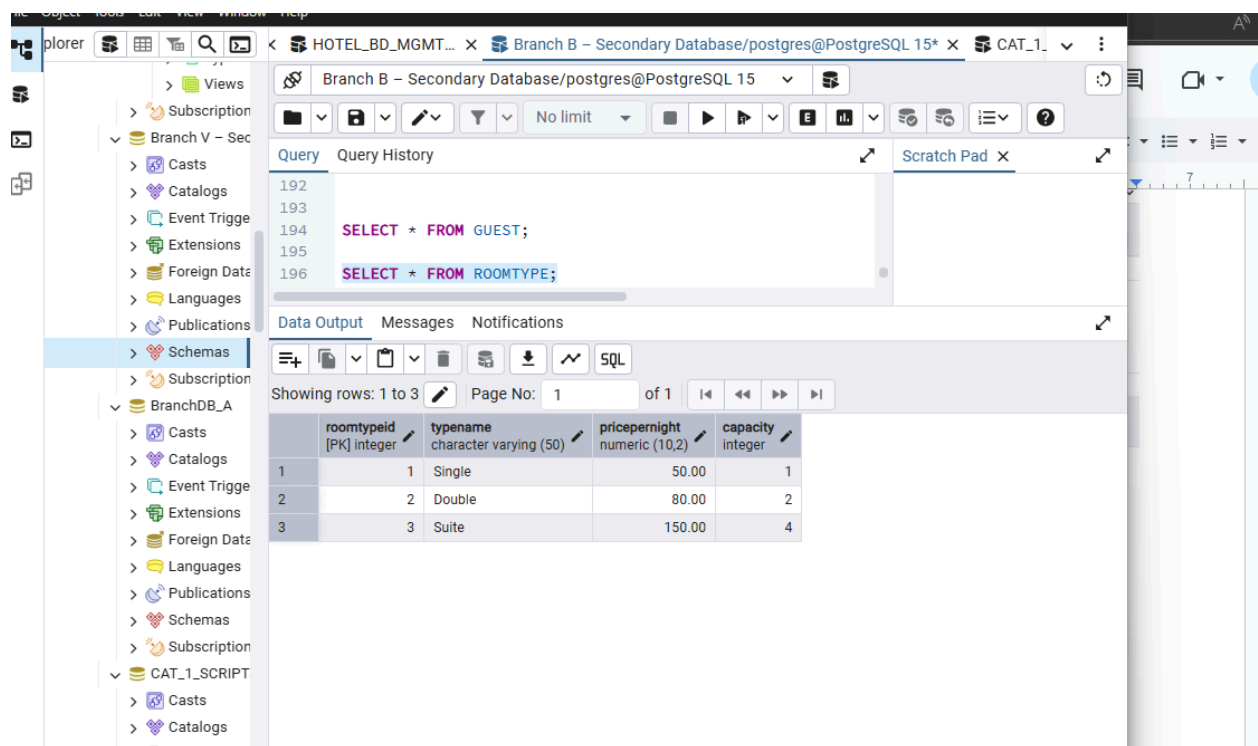
Data Output Messages Notifications

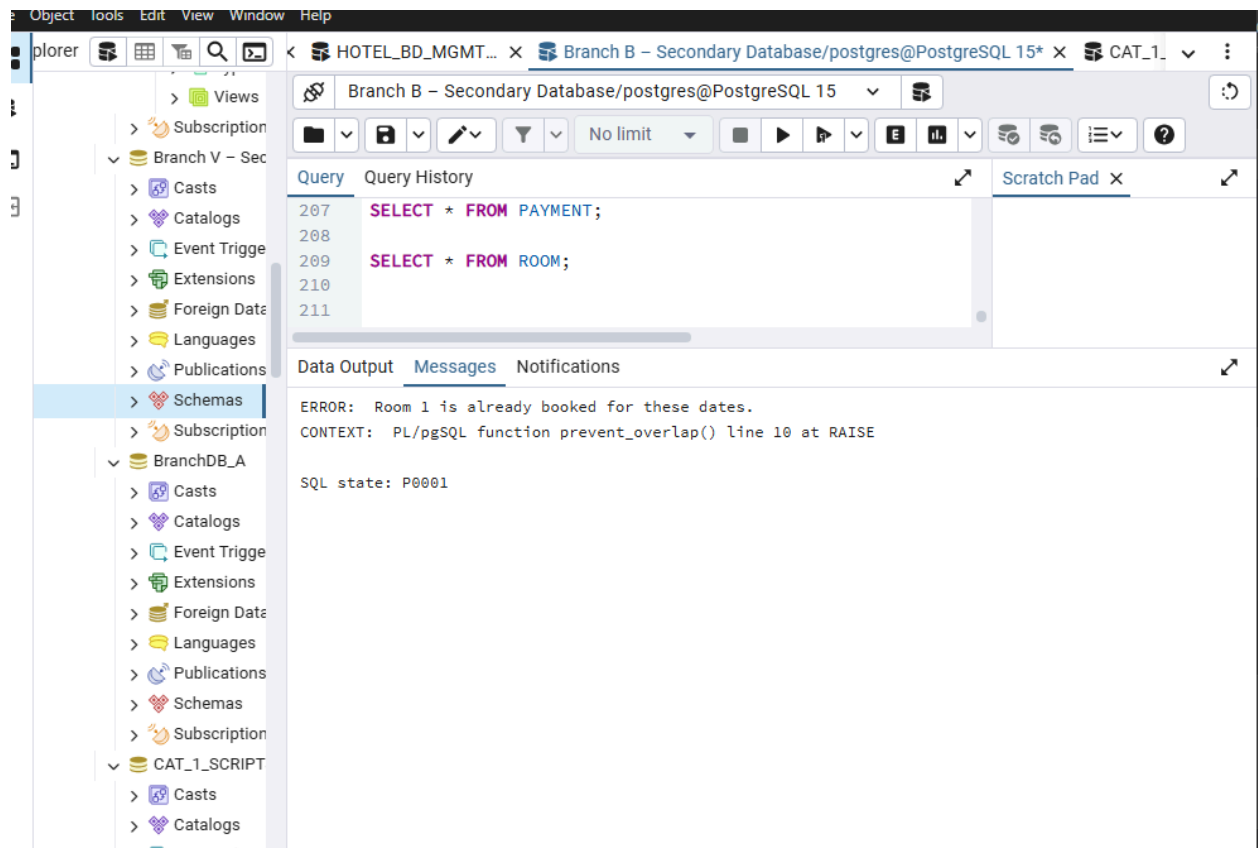
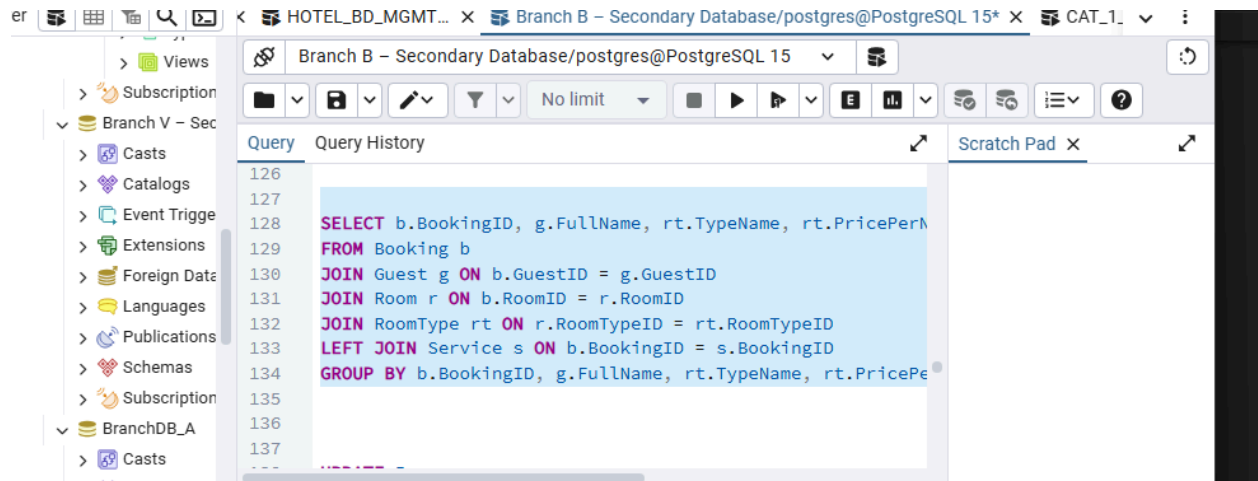
Showing rows: 1 to 10 Page No: 1 of 1

	roomid [PK] integer	roomtypeid integer	status character varying (20)	floor integer	description text
1	1	1	Available	1	Single room 101
2	2	1	Available	1	Single room 102
3	3	2	Available	2	Double room 201
4	4	2	Available	2	Double room 202
5	5	3	Available	3	Suite room 301
6	6	3	Available	3	Suite room 302
7	7	1	Available	1	Single room 103
8	8	2	Available	2	Double room 203
9	9	1	Available	1	Single room 104
10	10	2	Available	2	Double room 204

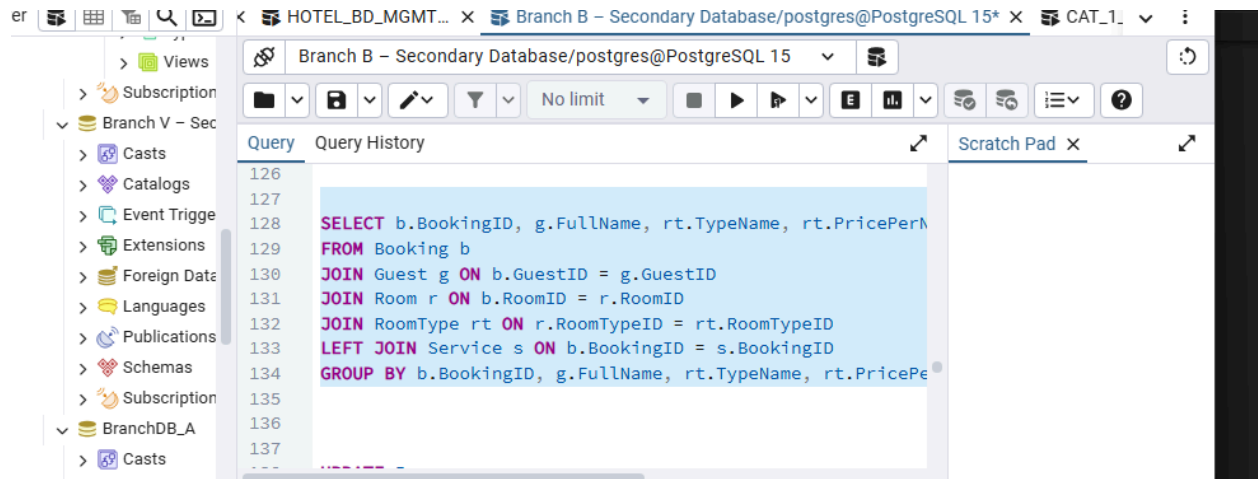


SELECT * FROM ROOMTYPE;





-- This will work (no overlap)



```
INSERT INTO Booking (GuestID, RoomID, CheckInDate, CheckOutDate, Status)  
VALUES (1, 1, '2025-11-01', '2025-11-05', 'Booked');
```

-- This will fail (overlaps with previous booking)

```
INSERT INTO Booking (GuestID, RoomID, CheckInDate, CheckOutDate, Status)  
VALUES (2, 1, '2025-11-03', '2025-11-06', 'Booked');
```

er [Icons] < HOTEL_BD_MGMT... x Branch B - Secondary Database/postgres@PostgreSQL 15* x CAT_1_ v

Branch B - Secondary Database/postgres@PostgreSQL 15

Views

- Subscription
- Branch V - Sec
- Casts
- Catalogs
- Event Triggers
- Extensions
- Foreign Data
- Languages
- Publications
- Schemas
- Subscription
- BranchDB_A
- Casts

Query Query History Scratch Pad x

```
126
127
128 SELECT b.BookingID, g.FullName, rt.TypeName, rt.PricePerM
129 FROM Booking b
130 JOIN Guest g ON b.GuestID = g.GuestID
131 JOIN Room r ON b.RoomID = r.RoomID
132 JOIN RoomType rt ON r.RoomTypeID = rt.RoomTypeID
133 LEFT JOIN Service s ON b.BookingID = s.BookingID
134 GROUP BY b.BookingID, g.FullName, rt.TypeName, rt.PricePe
135
136
137
```

Object Tools Edit View Window Help

colorer HOTEL_BOOKING... x HOTEL_BD_MGMT... x SCRIPTS_CAT_.sql* x CAT_1_SCRIPTS/p... x

Branch B - Secondary Database/postgres@PostgreSQL 15

Views

- Subscription
- Branch V - Sec
- Casts
- Catalogs
- Event Triggers
- Extensions
- Foreign Data
- Languages
- Publications
- Schemas
- Subscription
- BranchDB_A
- Casts
- Catalogs
- Event Triggers

Query Query History Scratch Pad x

```
322 relname as table_name,
323 tgenabled as status
324 FROM pg_trigger tg
325 JOIN pg_class cl ON tg.tgrelid = cl.oid
326 WHERE relname = 'booking';
```

Data Output Messages Notifications

Showing rows: 1 to 9 Page No: 1 of 1

	trigger_name	table_name	status
	name	name	'char'
1	RI_ConstraintTrigger_c_18422	booking	0
2	RI_ConstraintTrigger_c_18423	booking	0
3	RI_ConstraintTrigger_c_18427	booking	0
4	RI_ConstraintTrigger_c_18428	booking	0
5	RI_ConstraintTrigger_a_18437	booking	0
6	RI_ConstraintTrigger_a_18438	booking	0
7	RI_ConstraintTrigger_a_18449	booking	0
8	RI_ConstraintTrigger_a_18450	booking	0
9	trg_prevent_overlap	booking	0