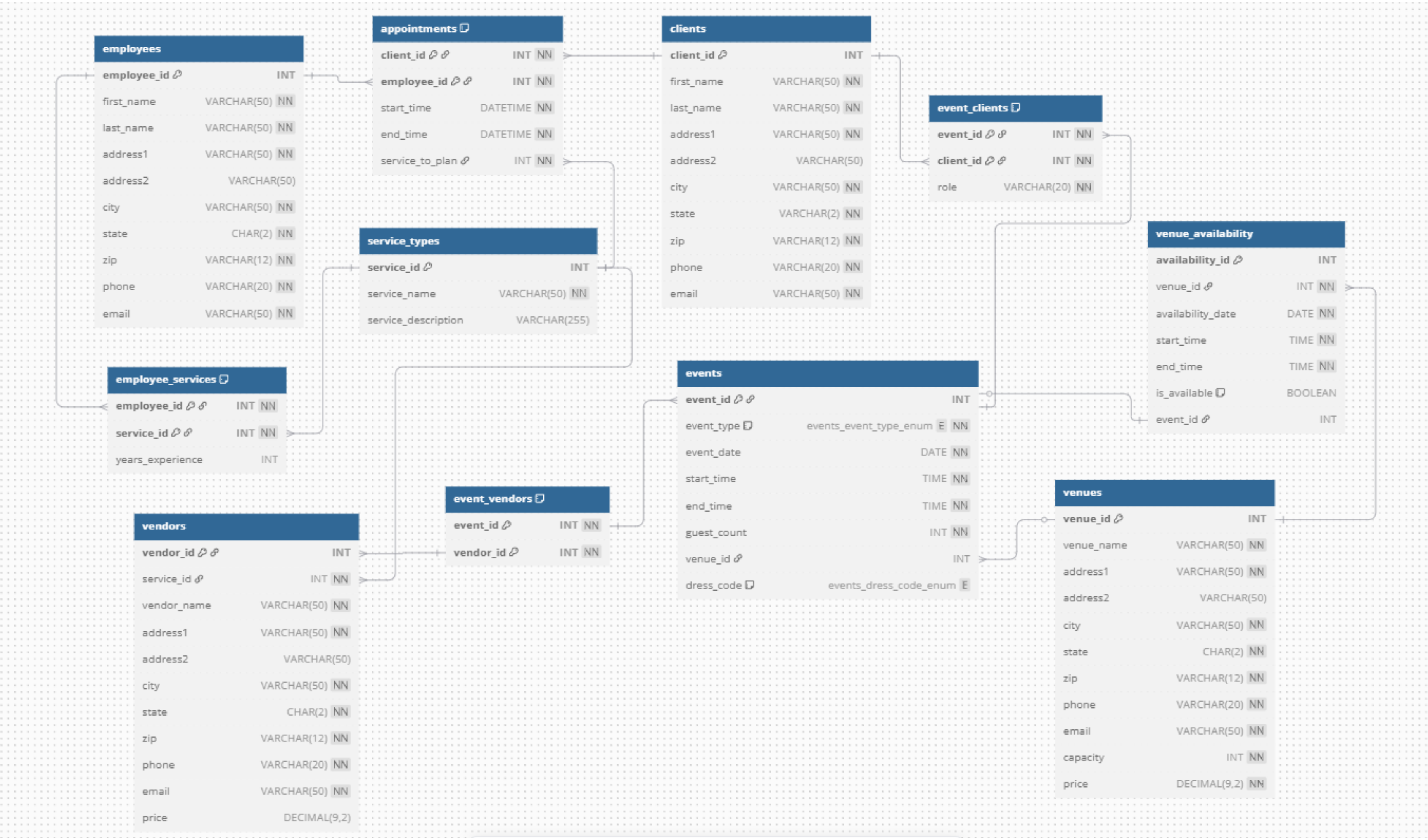
Technical Documentation

https://dbdiagram.io/d/Elegant-Occasions-with-Alyssa-6819c4a11ca52373f59fbb2f



employees

employee_id	INT	
first_name	VARCHAR(50)	NN
last_name	VARCHAR(50)	NN
address1	VARCHAR(50)	NN
address2	VARCHAR(50)	
city	VARCHAR(50)	NN
state	CHAR(2)	NN
zip	VARCHAR(12)	NN
phone	VARCHAR(20)	NN
email	VARCHAR(50)	NN

appointments

client_id	INT	NN
employee_id	INT	NN
start_time	DATETIME	NN
end_time	DATETIME	NN
service_to_plan	INT	NN

clients

client_id	INT	
first_name	VARCHAR(50)	NN
last_name	VARCHAR(50)	NN
address1	VARCHAR(50)	NN
address2	VARCHAR(50)	
city	VARCHAR(50)	NN
state	VARCHAR(2)	NN
zip	VARCHAR(12)	NN
phone	VARCHAR(20)	NN
email	VARCHAR(50)	NN

event_clients

event_id	INT	NN
client_id	INT	NN
role	VARCHAR(20)	NN

service_types

service_id	INT	
service_name	VARCHAR(50)	NN
service_description	VARCHAR(255)	

venue_availability

availability_id	INT	
venue_id	INT	NN
availability_date	DATE	NN
start_time	TIME	NN
end_time	TIME	NN
is_available	BOOLEAN	
event_id	INT	

employee_services

employee_id	INT	NN
service_id	INT	NN
years_experience	INT	

events

event_id	INT	
event_type	events_event_type_enum E	NN
event_date	DATE	NN
start_time	TIME	NN
end_time	TIME	NN
guest_count	INT	NN
venue_id	INT	
dress_code	events_dress_code_enum E	

event_vendors

event_id	INT	NN
vendor_id	INT	NN

vendors

vendor_id	INT	
service_id	INT	NN
vendor_name	VARCHAR(50)	NN
address1	VARCHAR(50)	NN
address2	VARCHAR(50)	
city	VARCHAR(50)	NN
state	CHAR(2)	NN
zip	VARCHAR(12)	NN
phone	VARCHAR(20)	NN
email	VARCHAR(50)	NN
price	DECIMAL(9,2)	

venues

venue_id	INT	
venue_name	VARCHAR(50)	NN
address1	VARCHAR(50)	NN
address2	VARCHAR(50)	
city	VARCHAR(50)	NN
state	CHAR(2)	NN
zip	VARCHAR(12)	NN
phone	VARCHAR(20)	NN
email	VARCHAR(50)	NN
capacity	INT	NN
price	DECIMAL(9,2)	NN

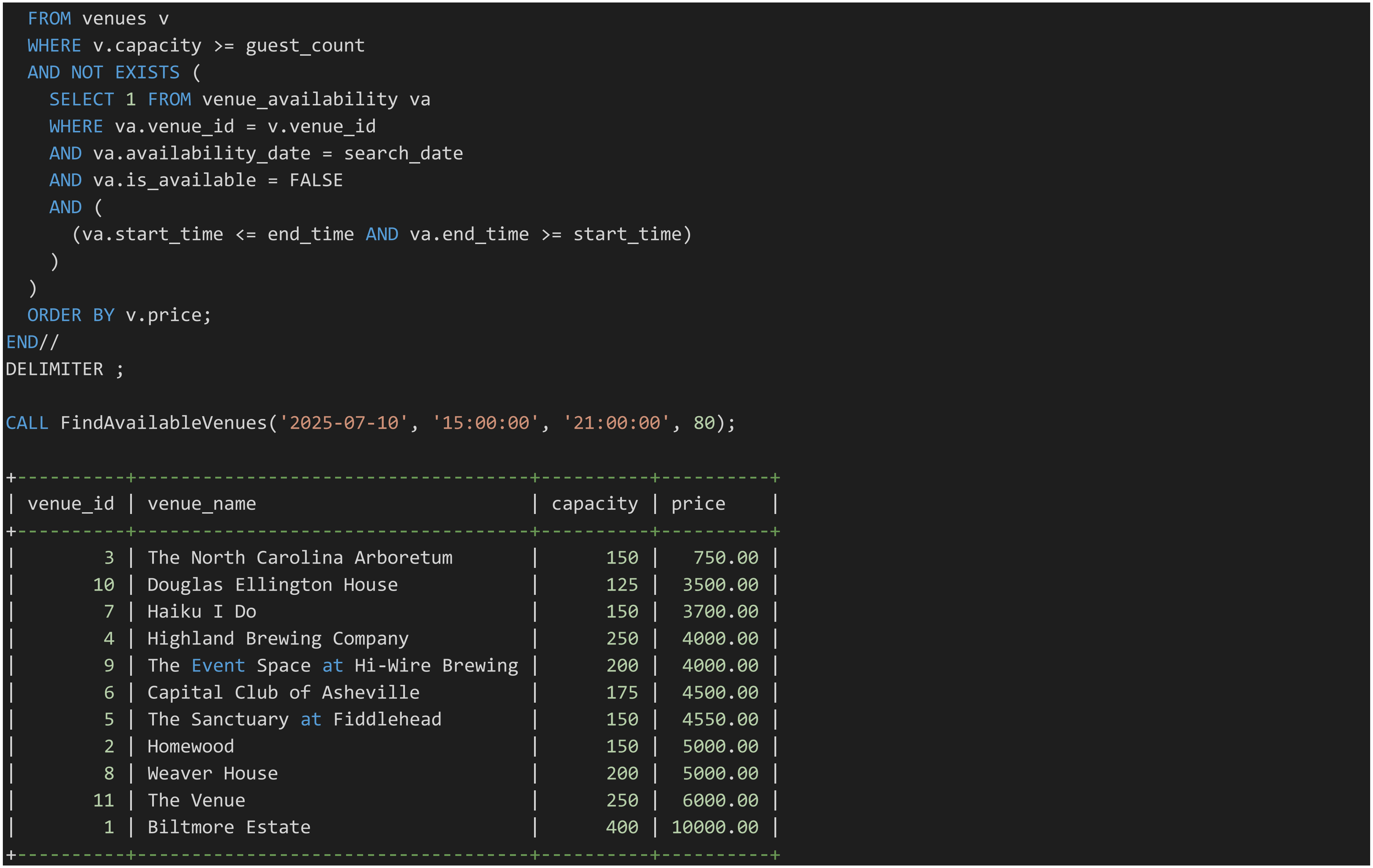
Sample Queries

- **Retrieve all appointments for a specific client.**

```
SELECT CONCAT(c.first_name, ' ', c.last_name) as client,
      CONCAT(e.first_name, ' ', e.last_name) as employee,
      a.start_time,
      a.end_time,
      st.service_name AS service
FROM appointments a
  JOIN employees e
  ON a.employee_id = e.employee_id
  JOIN clients c
  ON a.client_id = c.client_id
  JOIN service_types st
  ON a.service_to_plan = st.service_id
WHERE c.client_id = 4;

+----------------+---------------+---------------------+---------------------+--------------+
| client         | employee      | start_time          | end_time            | service      |
+----------------+---------------+---------------------+---------------------+--------------+
| Emily Burdette | Jasmine Patel | 2025-05-12 09:00:00 | 2025-05-12 10:00:00 | aesthetician |
| Emily Burdette | Chloe Ramirez | 2025-05-10 12:00:00 | 2025-05-10 13:00:00 | wedding cake |
+----------------+---------------+---------------------+---------------------+--------------+
```

- **Find available venues for a given date and guest count.**

```
DROP PROCEDURE IF EXISTS FindAvailableVenues;
DELIMITER //
CREATE PROCEDURE FindAvailableVenues(
  IN search_date DATE,
  IN start_time TIME,
  IN end_time TIME,
  IN guest_count INT
)
BEGIN
  SELECT v.venue_id, v.venue_name, v.capacity, v.price
```



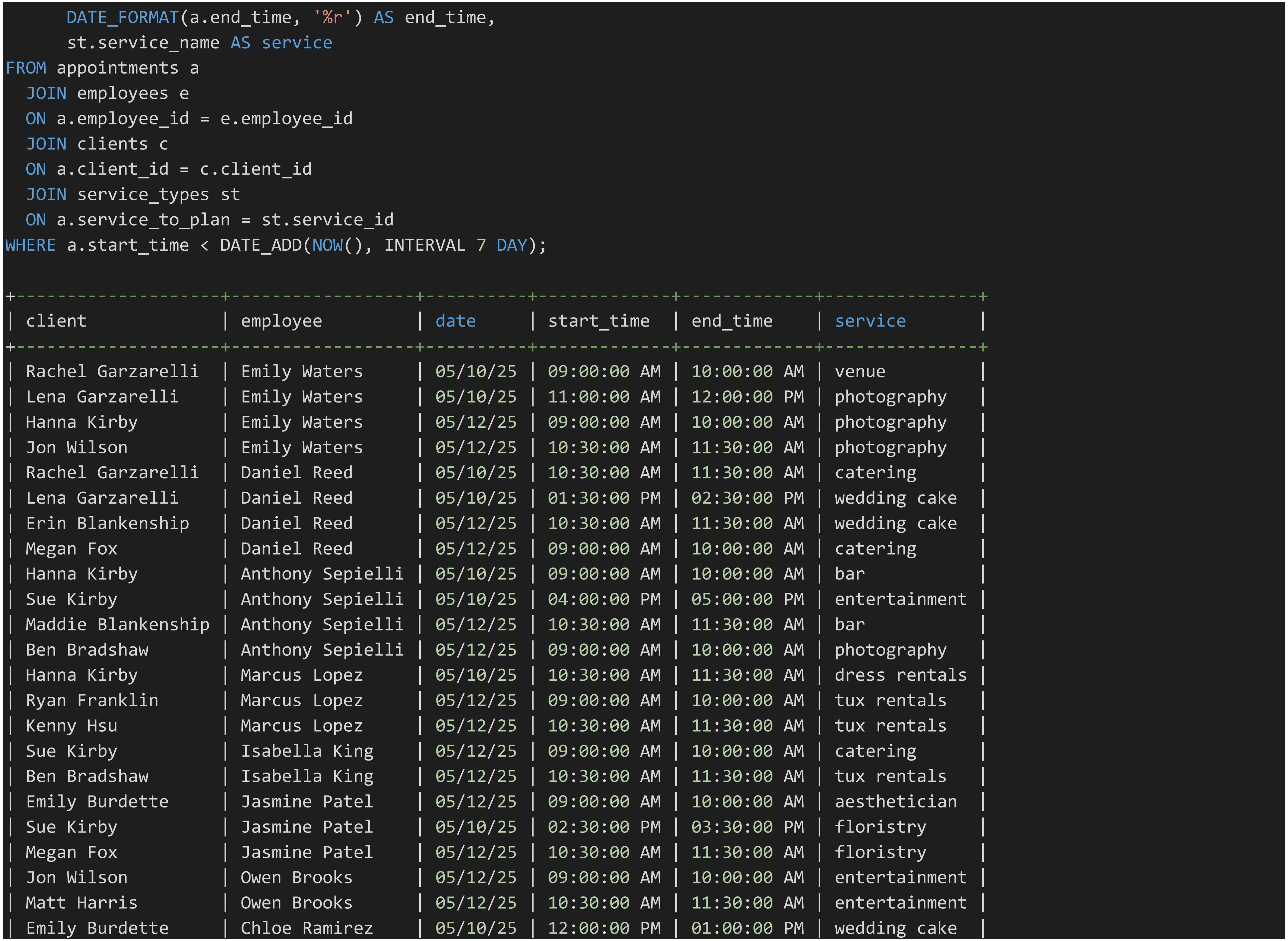
```
  FROM venues v
  WHERE v.capacity >= guest_count
  AND NOT EXISTS (
    SELECT 1 FROM venue_availability va
    WHERE va.venue_id = v.venue_id
    AND va.availability_date = search_date
    AND va.is_available = FALSE
    AND (
      (va.start_time <= end_time AND va.end_time >= start_time)
    )
  )
  ORDER BY v.price;
END//
DELIMITER ;

CALL FindAvailableVenues('2025-07-10', '15:00:00', '21:00:00', 80);

+----------+------------------------------------+----------+----------+
| venue_id | venue_name                         | capacity | price    |
+----------+------------------------------------+----------+----------+
|        3 | The North Carolina Arboretum       |      150 |   750.00 |
|       10 | Douglas Ellington House            |      125 |  3500.00 |
|        7 | Haiku I Do                         |      150 |  3700.00 |
|        4 | Highland Brewing Company           |      250 |  4000.00 |
|        9 | The Event Space at Hi-Wire Brewing |      200 |  4000.00 |
|        6 | Capital Club of Asheville          |      175 |  4500.00 |
|        5 | The Sanctuary at Fiddlehead        |      150 |  4550.00 |
|        2 | Homewood                           |      150 |  5000.00 |
|        8 | Weaver House                       |      200 |  5000.00 |
|       11 | The Venue                          |      250 |  6000.00 |
|        1 | Biltmore Estate                    |      400 | 10000.00 |
+----------+------------------------------------+----------+----------+
```

- **Calculate the total cost of services for a wedding.**

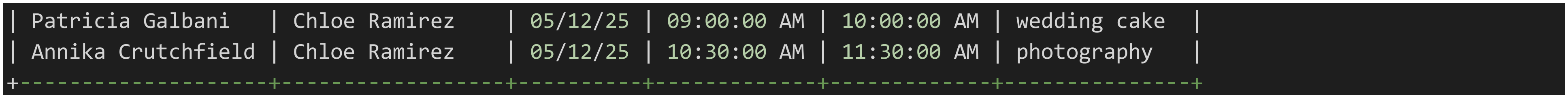
```
DROP PROCEDURE IF EXISTS calculateEventCost;
DELIMITER //
CREATE PROCEDURE calculateEventCost(
  IN event_id INT
)
BEGIN
  DECLARE total_event_cost DECIMAL(9,2);

  SELECT SUM(price)
  INTO total_event_cost
  FROM (
    SELECT ev.vendor_id, v.price
    FROM event_vendors ev
      JOIN vendors v
      ON ev.vendor_id = v.vendor_id
    WHERE ev.event_id = event_id
  ) t;

  SELECT CONCAT('$', total_event_cost) AS 'Total Event Cost:';
END //
DELIMITER ;

CALL calculateEventCost(4);

+-------------------+
| Total Event Cost: |
+-------------------+
| $17575.00         |
+-------------------+
```

- **Display upcoming appointments for the week.**

```
SELECT CONCAT(c.first_name, ' ', c.last_name) AS client,
      CONCAT(e.first_name, ' ', e.last_name) AS employee,
      DATE_FORMAT(a.start_time, '%m/%d/%y') AS date,
      DATE_FORMAT(a.start_time, '%r') AS start_time,
```

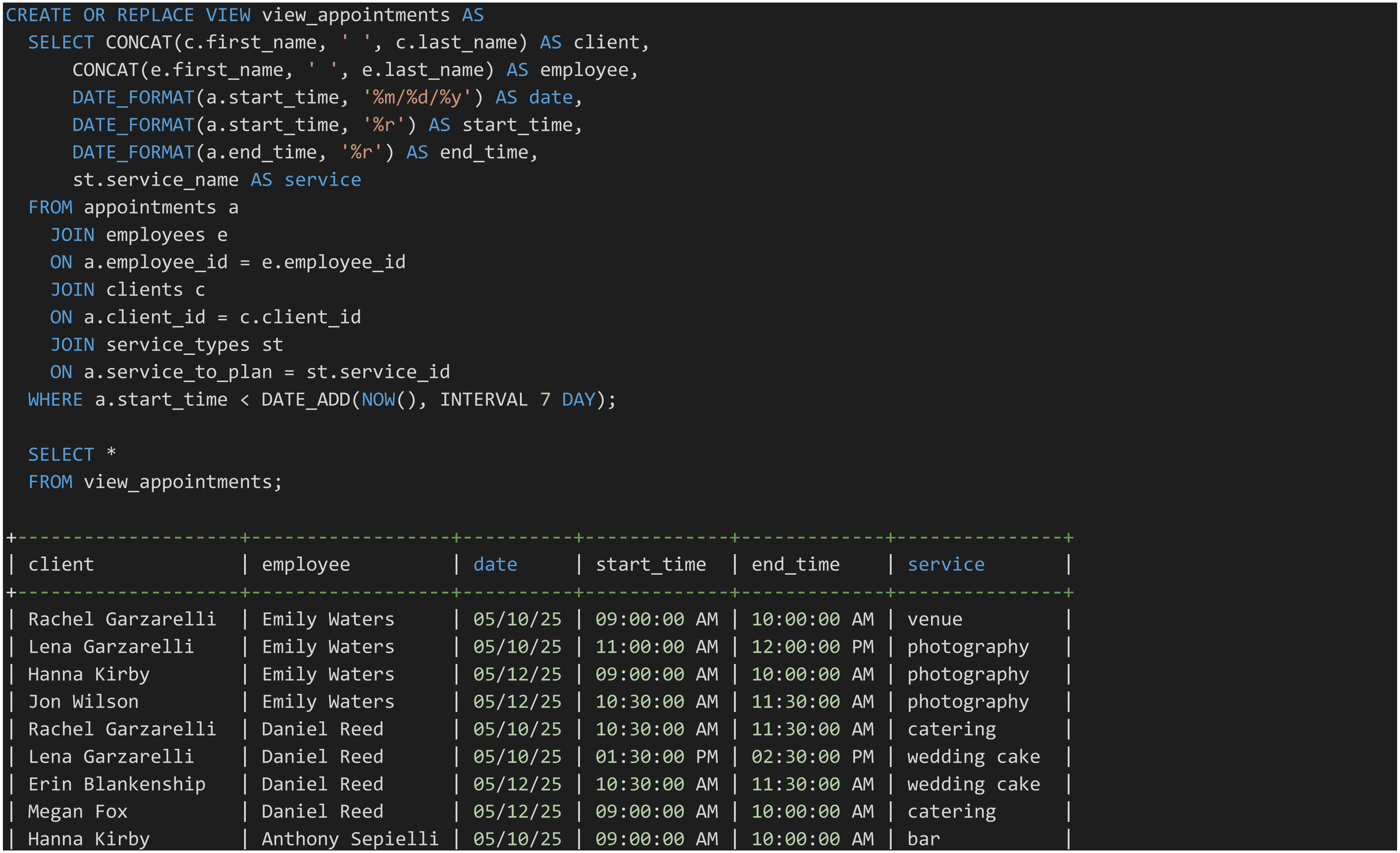


```
      DATE_FORMAT(a.end_time, '%r') AS end_time,
      st.service_name AS service
FROM appointments a
  JOIN employees e
  ON a.employee_id = e.employee_id
  JOIN clients c
  ON a.client_id = c.client_id
  JOIN service_types st
  ON a.service_to_plan = st.service_id
WHERE a.start_time < DATE_ADD(NOW(), INTERVAL 7 DAY);

+--------------------+------------------+----------+-------------+-------------+---------------+
| client             | employee         | date     | start_time  | end_time    | service       |
+--------------------+------------------+----------+-------------+-------------+---------------+
| Rachel Garzarelli  | Emily Waters     | 05/10/25 | 09:00:00 AM | 10:00:00 AM | venue         |
| Lena Garzarelli    | Emily Waters     | 05/10/25 | 11:00:00 AM | 12:00:00 PM | photography   |
| Hanna Kirby        | Emily Waters     | 05/12/25 | 09:00:00 AM | 10:00:00 AM | photography   |
| Jon Wilson         | Emily Waters     | 05/12/25 | 10:30:00 AM | 11:30:00 AM | photography   |
| Rachel Garzarelli  | Daniel Reed      | 05/10/25 | 10:30:00 AM | 11:30:00 AM | catering      |
| Lena Garzarelli    | Daniel Reed      | 05/10/25 | 01:30:00 PM | 02:30:00 PM | wedding cake  |
| Erin Blankenship   | Daniel Reed      | 05/12/25 | 10:30:00 AM | 11:30:00 AM | wedding cake  |
| Megan Fox          | Daniel Reed      | 05/12/25 | 09:00:00 AM | 10:00:00 AM | catering      |
| Hanna Kirby        | Anthony Sepielli | 05/10/25 | 09:00:00 AM | 10:00:00 AM | bar           |
| Sue Kirby          | Anthony Sepielli | 05/10/25 | 04:00:00 PM | 05:00:00 PM | entertainment |
| Maddie Blankenship | Anthony Sepielli | 05/12/25 | 10:30:00 AM | 11:30:00 AM | bar           |
| Ben Bradshaw       | Anthony Sepielli | 05/12/25 | 09:00:00 AM | 10:00:00 AM | photography   |
| Hanna Kirby        | Marcus Lopez     | 05/10/25 | 10:30:00 AM | 11:30:00 AM | dress rentals |
| Ryan Franklin      | Marcus Lopez     | 05/12/25 | 09:00:00 AM | 10:00:00 AM | tux rentals   |
| Kenny Hsu          | Marcus Lopez     | 05/12/25 | 10:30:00 AM | 11:30:00 AM | tux rentals   |
| Sue Kirby          | Isabella King    | 05/12/25 | 09:00:00 AM | 10:00:00 AM | catering      |
| Ben Bradshaw       | Isabella King    | 05/12/25 | 10:30:00 AM | 11:30:00 AM | tux rentals   |
| Emily Burdette     | Jasmine Patel    | 05/12/25 | 09:00:00 AM | 10:00:00 AM | aesthetician  |
| Sue Kirby          | Jasmine Patel    | 05/10/25 | 02:30:00 PM | 03:30:00 PM | floristry     |
| Megan Fox          | Jasmine Patel    | 05/12/25 | 10:30:00 AM | 11:30:00 AM | floristry     |
| Jon Wilson         | Owen Brooks      | 05/12/25 | 09:00:00 AM | 10:00:00 AM | entertainment |
| Matt Harris        | Owen Brooks      | 05/12/25 | 10:30:00 AM | 11:30:00 AM | entertainment |
| Emily Burdette     | Chloe Ramirez    | 05/10/25 | 12:00:00 PM | 01:00:00 PM | wedding cake  |
```

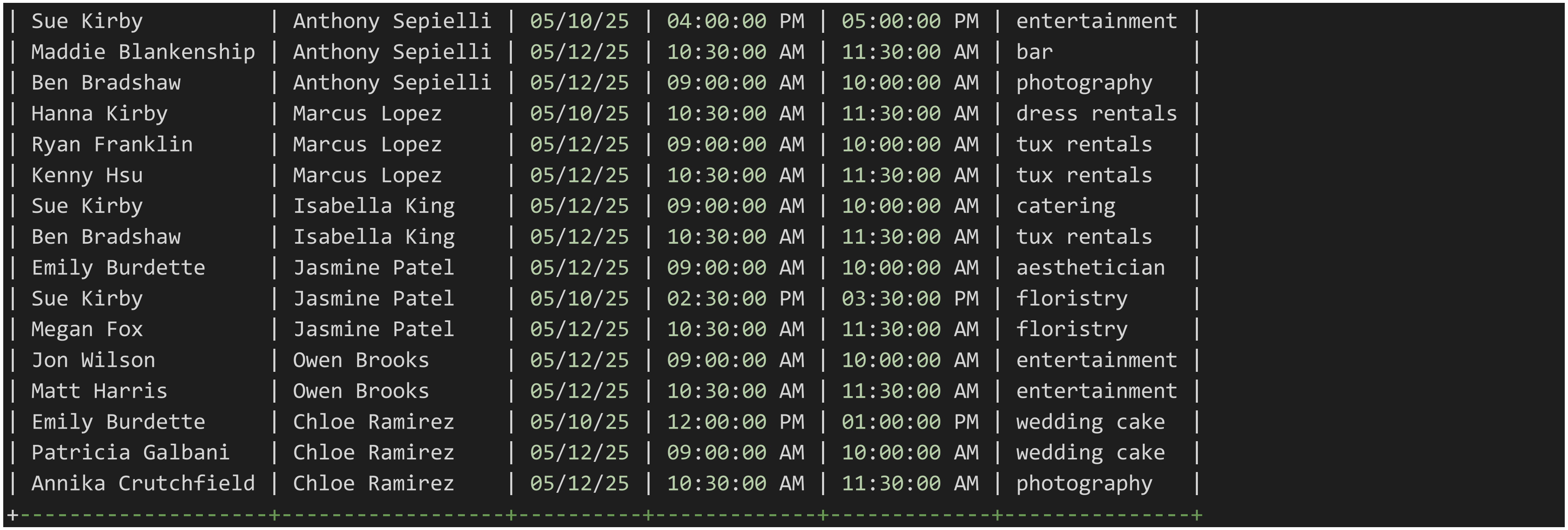


```
| Patricia Galbani   | Chloe Ramirez     | 05/12/25 | 09:00:00 AM | 10:00:00 AM | wedding cake   |
| Annika Crutchfield | Chloe Ramirez     | 05/12/25 | 10:30:00 AM | 11:30:00 AM | photography    |
+--------------------+-------------------+----------+-------------+-------------+----------------+
```

- **Create at least one view based on one of the queries above:**

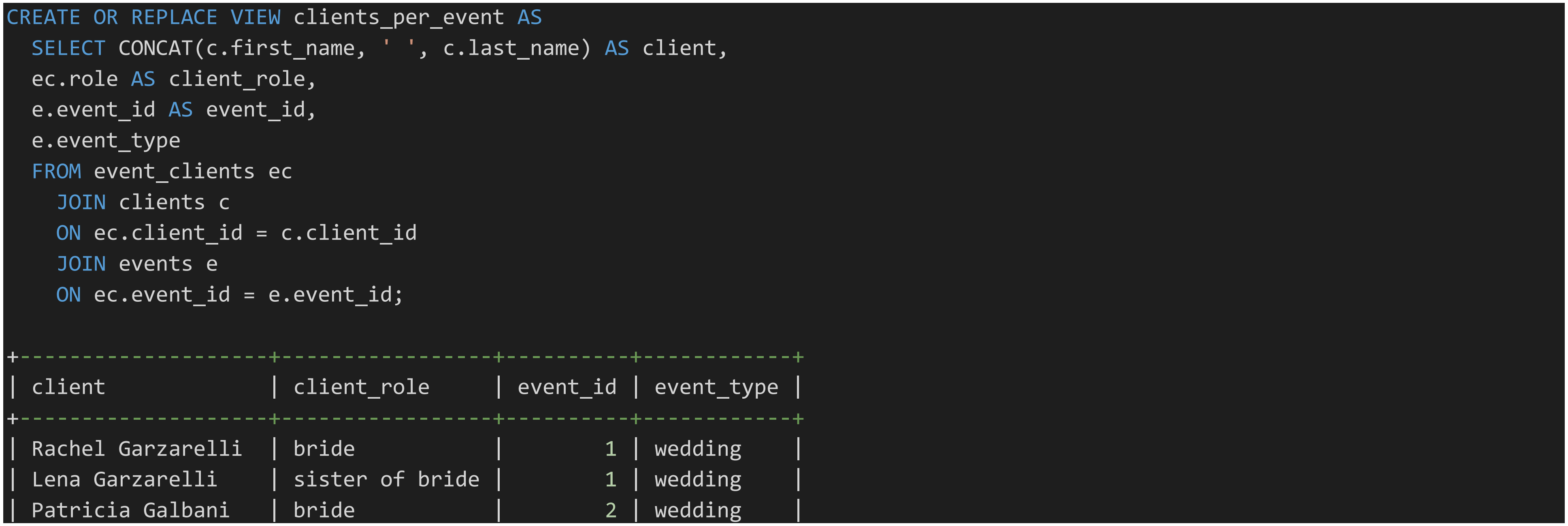


```
CREATE OR REPLACE VIEW view_appointments AS
  SELECT CONCAT(c.first_name, ' ', c.last_name) AS client,
      CONCAT(e.first_name, ' ', e.last_name) AS employee,
      DATE_FORMAT(a.start_time, '%m/%d/%y') AS date,
      DATE_FORMAT(a.start_time, '%r') AS start_time,
      DATE_FORMAT(a.end_time, '%r') AS end_time,
      st.service_name AS service
  FROM appointments a
    JOIN employees e
    ON a.employee_id = e.employee_id
    JOIN clients c
    ON a.client_id = c.client_id
    JOIN service_types st
    ON a.service_to_plan = st.service_id
  WHERE a.start_time < DATE_ADD(NOW(), INTERVAL 7 DAY);

  SELECT *
  FROM view_appointments;


+--------------------+-------------------+----------+-------------+-------------+----------------+
| client             | employee          | date     | start_time  | end_time    | service        |
+--------------------+-------------------+----------+-------------+-------------+----------------+
| Rachel Garzarelli  | Emily Waters      | 05/10/25 | 09:00:00 AM | 10:00:00 AM | venue          |
| Lena Garzarelli    | Emily Waters      | 05/10/25 | 11:00:00 AM | 12:00:00 PM | photography    |
| Hanna Kirby        | Emily Waters      | 05/12/25 | 09:00:00 AM | 10:00:00 AM | photography    |
| Jon Wilson         | Emily Waters      | 05/12/25 | 10:30:00 AM | 11:30:00 AM | photography    |
| Rachel Garzarelli  | Daniel Reed       | 05/10/25 | 10:30:00 AM | 11:30:00 AM | catering       |
| Lena Garzarelli    | Daniel Reed       | 05/10/25 | 01:30:00 PM | 02:30:00 PM | wedding cake   |
| Erin Blankenship   | Daniel Reed       | 05/12/25 | 10:30:00 AM | 11:30:00 AM | wedding cake   |
| Megan Fox          | Daniel Reed       | 05/12/25 | 09:00:00 AM | 10:00:00 AM | catering       |
| Hanna Kirby        | Anthony Sepielli  | 05/10/25 | 09:00:00 AM | 10:00:00 AM | bar            |
```



```
| Sue Kirby          | Anthony Sepielli | 05/10/25 | 04:00:00 PM | 05:00:00 PM | entertainment |
| Maddie Blankenship | Anthony Sepielli | 05/12/25 | 10:30:00 AM | 11:30:00 AM | bar           |
| Ben Bradshaw       | Anthony Sepielli | 05/12/25 | 09:00:00 AM | 10:00:00 AM | photography   |
| Hanna Kirby        | Marcus Lopez     | 05/10/25 | 10:30:00 AM | 11:30:00 AM | dress rentals |
| Ryan Franklin      | Marcus Lopez     | 05/12/25 | 09:00:00 AM | 10:00:00 AM | tux rentals   |
| Kenny Hsu          | Marcus Lopez     | 05/12/25 | 10:30:00 AM | 11:30:00 AM | tux rentals   |
| Sue Kirby          | Isabella King    | 05/12/25 | 09:00:00 AM | 10:00:00 AM | catering      |
| Ben Bradshaw       | Isabella King    | 05/12/25 | 10:30:00 AM | 11:30:00 AM | tux rentals   |
| Emily Burdette     | Jasmine Patel    | 05/12/25 | 09:00:00 AM | 10:00:00 AM | aesthetician  |
| Sue Kirby          | Jasmine Patel    | 05/10/25 | 02:30:00 PM | 03:30:00 PM | floristry     |
| Megan Fox          | Jasmine Patel    | 05/12/25 | 10:30:00 AM | 11:30:00 AM | floristry     |
| Jon Wilson         | Owen Brooks      | 05/12/25 | 09:00:00 AM | 10:00:00 AM | entertainment |
| Matt Harris        | Owen Brooks      | 05/12/25 | 10:30:00 AM | 11:30:00 AM | entertainment |
| Emily Burdette     | Chloe Ramirez    | 05/10/25 | 12:00:00 PM | 01:00:00 PM | wedding cake  |
| Patricia Galbani   | Chloe Ramirez    | 05/12/25 | 09:00:00 AM | 10:00:00 AM | wedding cake  |
| Annika Crutchfield | Chloe Ramirez    | 05/12/25 | 10:30:00 AM | 11:30:00 AM | photography   |
+--------------------+------------------+----------+-------------+-------------+---------------+
```

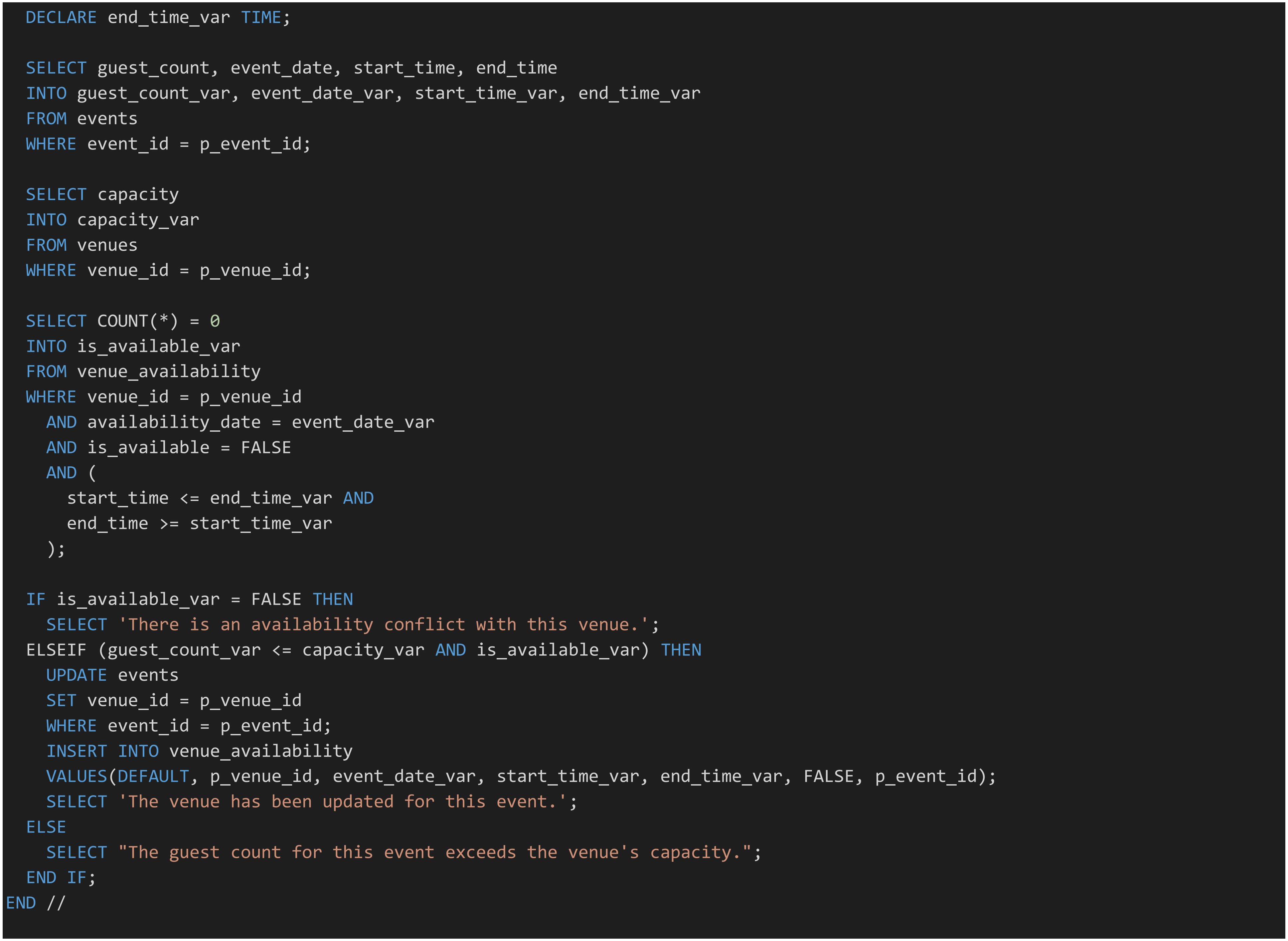
-- Displays clients, their roles, and the events that they're in



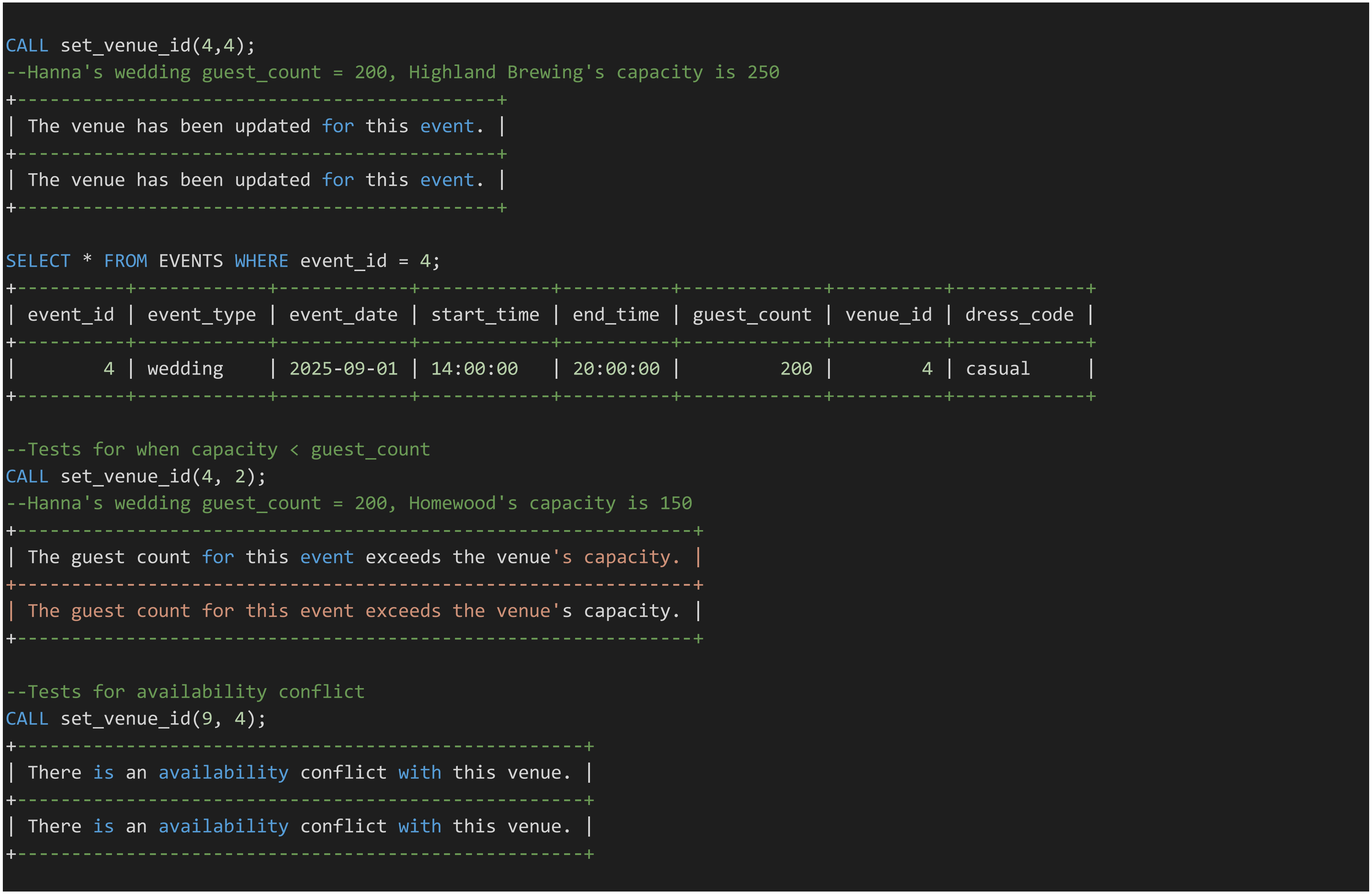
```
CREATE OR REPLACE VIEW clients_per_event AS
  SELECT CONCAT(c.first_name, ' ', c.last_name) AS client,
  ec.role AS client_role,
  e.event_id AS event_id,
  e.event_type
  FROM event_clients ec
    JOIN clients c
    ON ec.client_id = c.client_id
    JOIN events e
    ON ec.event_id = e.event_id;

+--------------------+-----------------+----------+------------+
| client             | client_role     | event_id | event_type |
+--------------------+-----------------+----------+------------+
| Rachel Garzarelli  | bride           |        1 | wedding    |
| Lena Garzarelli    | sister of bride |        1 | wedding    |
| Patricia Galbani   | bride           |        2 | wedding    |
| Jon Wilson         | groom           |        2 | wedding    |
| Kenny Hsu          | best man        |        2 | wedding    |
| Maddie Blankenship | bride           |        3 | wedding    |
| Erin Blankenship   | sister of bride |        3 | wedding    |
| Matt Harris        | groom           |        3 | wedding    |
| Hanna Kirby        | bride           |        4 | wedding    |
| Emily Burdette     | maid of honor   |        4 | wedding    |
| Sue Kirby          | mother of bride |        4 | wedding    |
| Ryan Franklin      | groom           |        4 | wedding    |
| Tanya Franklin     | mother of groom |        4 | wedding    |
| Annika Crutchfield | bride           |        5 | wedding    |
| Alec Codeman       | groom           |        5 | wedding    |
| Ben Bradshaw       | groom           |        6 | wedding    |
| Megan Fox          | bride           |        6 | wedding    |
| Ben Bradshaw       | groom           |        7 | reception  |
| Megan Fox          | bride           |        7 | reception  |
| Hanna Kirby        | bride           |        8 | reception  |
| Emily Burdette     | maid of honor   |        8 | reception  |
| Sue Kirby          | mother of bride |        8 | reception  |
| Ryan Franklin      | groom           |        8 | reception  |
| Tanya Franklin     | mother of groom |        8 | reception  |
+--------------------+-----------------+----------+------------+
```

-- Sets venue_id for an event

```
DROP PROCEDURE IF EXISTS set_venue_id;
DELIMITER //
CREATE PROCEDURE set_venue_id(
  IN p_event_id INT,
  IN p_venue_id INT
)
BEGIN
  DECLARE guest_count_var INT;
  DECLARE capacity_var INT;
  DECLARE is_available_var BOOLEAN;
  DECLARE event_date_var DATE;
  DECLARE start_time_var TIME;
```



```
  DECLARE end_time_var TIME;

  SELECT guest_count, event_date, start_time, end_time
  INTO guest_count_var, event_date_var, start_time_var, end_time_var
  FROM events
  WHERE event_id = p_event_id;

  SELECT capacity
  INTO capacity_var
  FROM venues
  WHERE venue_id = p_venue_id;

  SELECT COUNT(*) = 0
  INTO is_available_var
  FROM venue_availability
  WHERE venue_id = p_venue_id
    AND availability_date = event_date_var
    AND is_available = FALSE
    AND (
      start_time <= end_time_var AND
      end_time >= start_time_var
    );

  IF is_available_var = FALSE THEN
    SELECT 'There is an availability conflict with this venue.';
  ELSEIF (guest_count_var <= capacity_var AND is_available_var) THEN
    UPDATE events
    SET venue_id = p_venue_id
    WHERE event_id = p_event_id;
    INSERT INTO venue_availability
    VALUES(DEFAULT, p_venue_id, event_date_var, start_time_var, end_time_var, FALSE, p_event_id);
    SELECT 'The venue has been updated for this event.';
  ELSE
    SELECT "The guest count for this event exceeds the venue's capacity.";
  END IF;
END //
```



```
CALL set_venue_id(4,4);
--Hanna's wedding guest_count = 200, Highland Brewing's capacity is 250
+--------------------------------------------+
| The venue has been updated for this event. |
+--------------------------------------------+
| The venue has been updated for this event. |
+--------------------------------------------+

SELECT * FROM EVENTS WHERE event_id = 4;
+----------+------------+------------+------------+----------+-------------+----------+------------+
| event_id | event_type | event_date | start_time | end_time | guest_count | venue_id | dress_code |
+----------+------------+------------+------------+----------+-------------+----------+------------+
|        4 | wedding    | 2025-09-01 | 14:00:00   | 20:00:00 |         200 |        4 | casual     |
+----------+------------+------------+------------+----------+-------------+----------+------------+

--Tests for when capacity < guest_count
CALL set_venue_id(4, 2);
--Hanna's wedding guest_count = 200, Homewood's capacity is 150
+---------------------------------------------------------------+
| The guest count for this event exceeds the venue's capacity. |
+---------------------------------------------------------------+
| The guest count for this event exceeds the venue's capacity. |
+---------------------------------------------------------------+

--Tests for availability conflict
CALL set_venue_id(9, 4);
+----------------------------------------------------+
| There is an availability conflict with this venue. |
+----------------------------------------------------+
| There is an availability conflict with this venue. |
+----------------------------------------------------+
```