SQL-Murder-Mystery: Solution by Mark Smith

```
select description
from crime_scene_report
where type = 'murder'and city = 'SQL
City'and date = '20180115'
```

Here is the crime scene report: "Security footage shows that there were 2 witnesses. The first witness lives at the last house on ""Northwestern Dr"". The second witness, named Annabel, lives somewhere on ""Franklin Ave""."

The first witness: 14887 Morty Schapiro 4919   Northwestern Dr

```
SELECT id, name, address_number, address_street_name
from person
where address_street_name like 'Northwestern Dr'
order by address_number desc
```

The second witness: 16371 Annabel Miller 103 Franklin Ave

```
SELECT id, name, address_number, address_street_name
from person
where (address_street_name like 'Franklin Ave') and (name like '%Annabel%')
```

The first witness Morty Schapiro reports that: "I heard a gunshot and then saw a man run out. He had a ""Get Fit Now Gym"" bag. The membership number on the bag started with ""48Z"". Only gold members have those bags. The man got into a car with a plate that included ""H42W""."

```
select person_id, transcript
from interview
where person_id = 14887
```

The second witness Annabel Miller reports that: "I saw the murder happen, and I recognized the killer from my gym when I was working out last week on January the 9th."

```
select person_id, transcript
from interview
where person_id = 16371
```

Looking at the get_fit_now tables with the clues provided:

```
SELECT *
FROM get_fit_now_check_in i
JOIN get_fit_now_member m
on i.membership_id = m.id
where membership_status = 'gold' and membership_id like '48Z%'
```

We find that the two persons of interest are Jow Germuska and Jeremy Bowers.

Now we go to the driver's license data to use another clue:

```
SELECT *
from drivers_license d
join person p
ON  p.license_id = d.id
WHERE plate_number like '%H42W%'
```

Joining the driver's license data with the person data we find that the car plate belonged to Jeremy Bowers:

423327 30   70   brown brown male   0H42W2   Chevrolet   Spark LS   67318
         Jeremy Bowers 423327 530   Washington Pl, Apt 3A   871539279

I then used this query with the name I found to trigger the solution:

```
INSERT INTO solution VALUES (1, 'Jeremy Bowers');

    SELECT value FROM solution;
```

And was told "Congrats, you found the murderer! But wait, there's more... If you think you're up for a challenge, try querying the interview transcript of the murderer to find the real villain behind this crime. If you feel especially confident in your SQL skills, try to complete this final step with no more than 2 queries. Use this same INSERT statement with your new suspect to check your answer."

Using

```
SELECT transcript
from interview i
join person p
on p.id = i.person_id
where name like 'Jeremy Bowers'
```

Jeremy Bowers claimed "I was hired by a woman with a lot of money. I don't know her name but I know she's around 5'5"" (65"") or 5'7"" (67""). She has red hair and she drives a Tesla Model S. I know that she attended the SQL Symphony Concert 3 times in December 2017."

By using this query

```
select *
from drivers_license d
Join person p
ON d.id = p.license_id
join income
on income.ssn = p.ssn
join facebook_event_checkin f
on p.id = f.person_id
where car_make = 'Tesla' and car_model = 'Model S' and hair_color = 'red' and gender = 'female' and height
between 65 and 67
```

I found that Miranda Priestly attended the SQL Symphony 3 times as Jeremy Bowers stated. She is 66" tall with red hair, driving a Tesla Model S. She makes an annual income of $310,000, which some consider "a lot of money".

Querying with Miranda Priestly reveals: "Congrats, you found the brains behind the murder! Everyone in SQL City hails you as the greatest SQL detective of all time. Time to break out the champagne!"

```
INSERT INTO solution VALUES (1, 'Miranda Priestly');

    SELECT value FROM solution;
```