

Murder_in_SQL_City

1. `SELECT * FROM crime_scene_report WHERE city = "SQL City" AND date = "20180115" AND type = "murder";`

date	type	description	city
20180115	murder	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".	SQL City

2. `SELECT SQL FROM sqlite_master WHERE name = 'person';`

```
=> CREATE TABLE person (id integer PRIMARY KEY, name text, license_id integer, address_number integer, address_street_name text, ssn CHAR REFERENCES income (ssn), FOREIGN KEY (license_id) REFERENCES drivers_license (id))
```

3. `SELECT name FROM person WHERE address_street_name = "Northwestern Dr" AND address_number = (SELECT MAX(address_number) FROM person WHERE address_street_name = "Northwestern Dr");`

name
Morty Schapiro

OR

```
SELECT id, name, address_number, address_street_name FROM person WHERE address_street_name = "Northwestern Dr" ORDER BY address_number DESC LIMIT 1;
```

id	name	address_number	address_street_name
14887	Morty Schapiro	4919	Northwestern Dr

4. `SELECT sql FROM sqlite_master where name = "interview";`

```
=> CREATE TABLE interview (person_id integer, transcript text, FOREIGN KEY (person_id) REFERENCES person(id))
```

5. `SELECT id FROM person WHERE name = "Morty Schapiro";`

id
14887

6. and then select the transcript using that:

```
SELECT transcript FROM interview WHERE person_id=14887;
```

```
| transcript |
| ----- |
| 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". |
```

Alternative query to get both transcripts together

```
SELECT * FROM interview WHERE person_id IN ("14887", "16371");
```

```
| person_id | transcript |
| ----- | ----- |
| 14887 | 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". |
| 16371 | I saw the murder happen, and I recognized the killer from my gym when |
| | I was working out last week on January the 9th. |
```

7. `SELECT sql FROM sqlite_master WHERE name="get_fit_now_member";`
`=> CREATE TABLE get_fit_now_member (id text PRIMARY KEY, person_id integer, name text, membership_start_date integer, membership_status text, FOREIGN KEY (person_id) REFERENCES person(id))`
8. `SELECT name, membership_status FROM get_fit_now_member WHERE id LIKE "48Z%" AND membership_status="gold";`

```
| name | membership_status |
| ----- | ----- |
| Joe Germuska | gold |
| Jeremy Bowers | gold |
```

9. `SELECT name, membership_status, membership_start_date FROM get_fit_now_member WHERE id LIKE "48Z%" AND membership_status="gold";`

```
| name | membership_status | membership_start_date |
| ----- | ----- | ----- |
| Joe Germuska | gold | 20160305 |
| Jeremy Bowers | gold | 20160101 |
```

Hmmm - they weren't members in 2015. So, go back to the other witness.

10. `SELECT id, name, address_street_name FROM person WHERE name LIKE "%annabel%" AND address_street_name = "Franklin Ave";`

id	name	address_street_name
16371	Annabel Miller	Franklin Ave

11. `SELECT transcript FROM interview WHERE person_id=16371;`

transcript
"I saw the murder happen, and I recognized the killer from my gym when I was working out last week on January the 9th."

12. `SELECT sql FROM sqlite_master WHERE name="get_fit_now_check_in";`

```
=> CREATE TABLE get_fit_now_check_in (
    membership_id text,
    check_in_date integer,
    check_in_time integer,
    check_out_time integer,
    FOREIGN KEY (membership_id) REFERENCES get_fit_now_member(id)
)
```

13. `SELECT * FROM get_fit_now_member WHERE name = "Annabel Miller";`

id	person_id	name	membership_start_date	membership_status
90081	16371	Annabel Miller	20160208	gold

14. `SELECT * FROM get_fit_now_check_in WHERE membership_id = 90081 AND check_in_date = "20180109";`

membership_id	check_in_date	check_in_time	check_out_time
90081	20180109	1600	1700

15. `SELECT * FROM get_fit_now_check_in WHERE check_in_date = "20180109" AND membership_id LIKE "48Z%" AND check_out_time <= 1700;`

membership_id	check_in_date	check_in_time	check_out_time
48Z55	20180109	1530	1700

16. `SELECT name, membership_status FROM get_fit_now_member WHERE id LIKE "48Z55";`

=>

name	membership_status
-----	-----
Jeremy Bowers	gold

17. CORRECT!