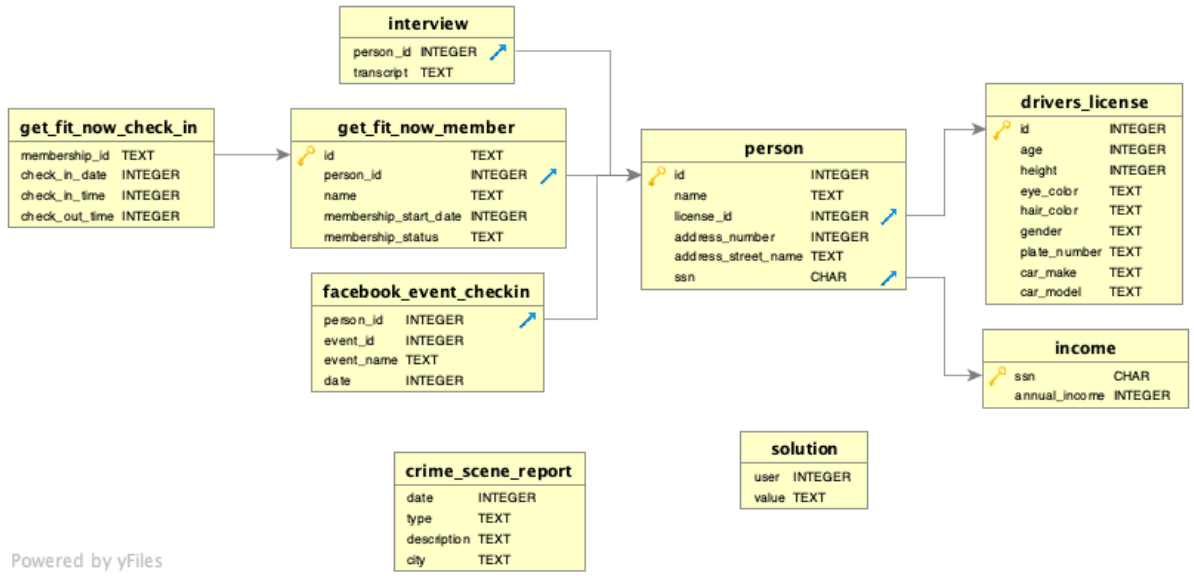
# *SQL Murder Mystery*

Schema diagram:-




We have: -

Date - Jan.15, 2018

Place = SQL City

## 1. Query

```
select * from crime_scene_report
where date = 20180115 and City = 'SQL City'   and type = ‘murder’
```

Now we have: -

| 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 |

Now we have two names (witness)

| Name | address | house no. |
|---|---|---|
| N/A | Northwestern Dr | last/(max) |
| Annabel | Franklin Ave | N/A |

With this data we gonna use some queries to find more details which are provided in **person** Table

## 2. Query

```
select * from person
where address_street_name = 'Northwestern Dr' and
address_number = (select max(address_number) from person)
```

Now we have:-

| id | name | license_id | address_number | address_street_name | ssn |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 14887 | Morty Schapiro | 118009 | 4919 | Northwestern Dr | 111564949 |

## 3. Query

```
select * from person
where address_street_name = 'Franklin Ave' and name like 'Annabel%'
```

Now we have:-

| id | name | license_id | address_number | address_street_name | ssn |
|---|---|---|---|---|---|
| 16371 | Annabel Miller | 490173 | 103 | Franklin Ave | 318771143 |

With this data we going to find some more data related to the murder so we have to check the **interview** table to know that what these persons have seen and told about the murder.

4. Query

```
select * from interview
where person_id = 14887 or person_id = 16371
```

Now we have:-

| 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. |

With this data, we have to find the gold members in the gym and know more about them so we have to use **get_fit_now_member** table

5. Query

```
select * from get_fit_now_member
where membership_status = 'gold' and id like '%48Z%'
```

Now we have two persons:-

| id | person_id | name | membership_start_date | membership_status |
|---|---|---|---|---|
| 48Z7A | 28819 | Joe Germuska | 20160305 | gold |
| 48Z55 | 67318 | Jeremy Bowers | 20160101 | gold |

Now we going to use the 2nd person statement for that we have to use **get_fit_now_check_in** table

6. Query

```
select * from get_fit_now_check_in
where membership_id = '48Z7A' or membership_id = '48Z55'
and  check_in_date = 20180109
```

Now we havr the data:-

| membership_id | check_in_date | check_in_time | check_out_time |
|---|---|---|---|
| 48Z7A | 20180109 | 1600 | 1730 |
| 48Z55 | 20180109 | 1530 | 1700 |

Now we have the check_in and check_out time of both the persons now we gonna use facebook_event_checkin to find more insights about the murder

7. Query

```
select * from facebook_event_checkin
where date = 20180115 and person_id = 28819 or person_id = 67318
```

| person_id | event_id | event_name | date |
|---|---|---|---|
| 67318 | 4719 | The Funky Grooves Tour | 20180115 |
| 67318 | 1143 | SQL Symphony Concert | 20171206 |

The person_id 67318 was in the Facebook event on the date of  15 Jan 2018
If we want to know more about them we have to use person table to find license_id so we can know that who have the number plate with “H42W”

8. Query

```
select * from person
where id = 28819 or id = 67318
```

| id | name | license_id | address_number | address_street_name | ssn |
|---|---|---|---|---|---|
| 28819 | Joe Germuska | 173289 | 111 | Fisk Rd | 138909730 |

| | | | | | |
|---|---|---|---|---|---|
| 67318 | Jeremy Bowers | 423327 | 530 | Washington Pl, Apt 3A | 871539279 |

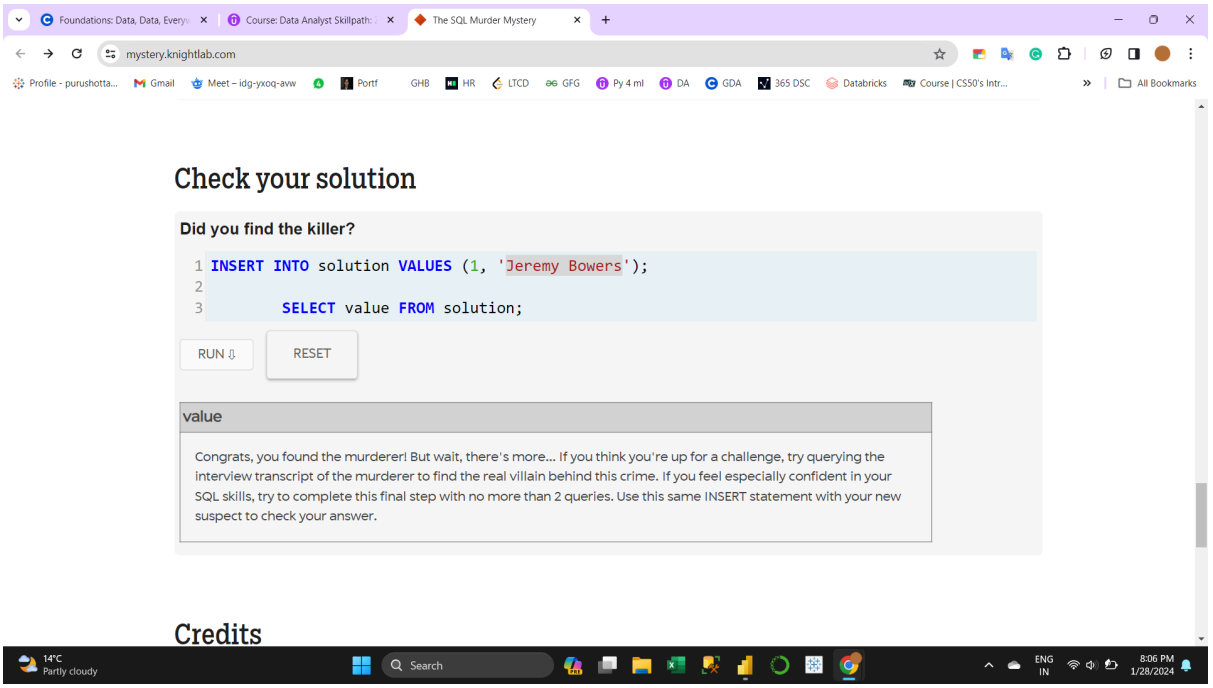
If we use the license_id to find the number plate of the car from drivrs_license table

9. Query

```
select * from drivers_license
where id = 423327
```

| id | age | height | eye_color | hair_color | gender | plate_number | car_make | car_model |
|---|---|---|---|---|---|---|---|---|
| 423327 | 30 | 70 | brown | brown | male | 0H42W2 | Chevrolet | Spark LS |

Now we have the murderer.
And the name of the murderer is '**Jeremy Bowers**'




We found the murderer but we have to find the mind behind the murderer

10. Query

```
select * from interview
where person_id  = 67318
```

| person_id | transcript |
|---|---|
| 67318 | 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. |

We have to find the lady's details so we gonna use the details that we got from the murderer

11. Query

```
select * from drivers_license
```

where hair_color = 'red' and height between 65 and 67 and car_make = 'Tesla'

| id | age | height | eye_color | hair_color | gender | plate_number | car_make | car_model |
|---|---|---|---|---|---|---|---|---|
| 202298 | 68 | 66 | green | red | female | 500123 | Tesla | Model S |
| 291182 | 65 | 66 | blue | red | female | 08CM64 | Tesla | Model S |
| 918773 | 48 | 65 | black | red | female | 917UU3 | Tesla | Model S |

12. Query

select * from person
where license_id = 202298 or license_id = 291182 or license_id = 918773

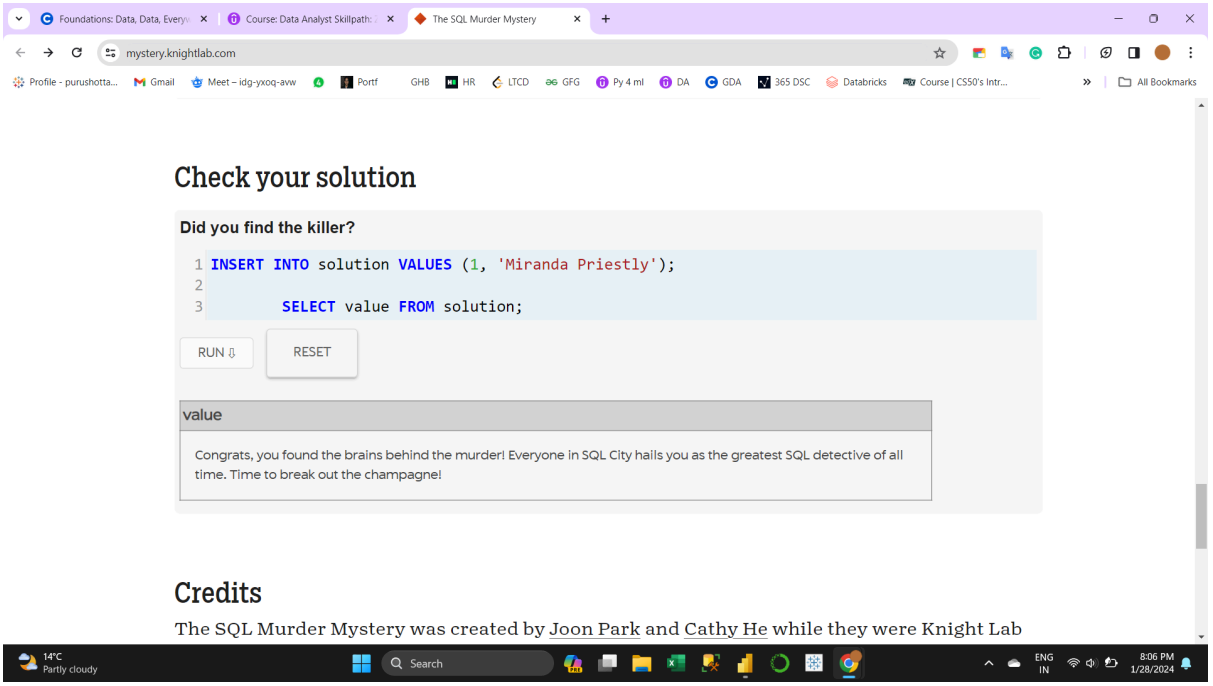
| id | name | license_id | address_number | address_street_name | ssn |
|---|---|---|---|---|---|
| 78881 | Red Korb | 918773 | 107 | Camerata Dr | 961388910 |
| 90700 | Regina George | 291182 | 332 | Maple Ave | 337169072 |
| 99716 | Miranda Priestly | 202298 | 1883 | Golden Ave | 987756388 |

13. Query

select person_id, count(*) from facebook_event_checkin
where person_id = 78881 or person_id = 90700 or person_id = 99716
group by event_name

| person_id | count(*) |
|---|---|
| 99716 | 3 |

Now we found the brains behind the murder is **Miranda Priestly**




**Solved 😊**

If you want to solve this problem use this link:- [Sql murder mystery]