

Laboratorio 3

Marianna Flores 20180040

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In [1]: import pandas as pd
```

PARTE 2

Asesino 1

```
In [2]: import sqlite3
con = sqlite3.connect('sql-murder-mystery.db')
```

```
In [3]: query = "SELECT name FROM sqlite_master WHERE type = 'table'"
tables = pd.read_sql(query,con)
tables
```

Out[3]:

	name
0	crime_scene_report
1	drivers_license
2	person
3	facebook_event_checkin
4	interview
5	get_fit_now_member
6	get_fit_now_check_in
7	income
8	solution

```
In [4]: query = "SELECT * from crime_scene_report;"
tables = pd.read_sql(query,con)
tables
```

Out[4]:

	date	type	description	city
0	20180115	robbery	A Man Dressed as Spider-Man Is on a Robbery Spree	NYC
1	20180115	murder	Life? Dont talk to me about life.	Albany
2	20180115	murder	Mama, I killed a man, put a gun against his he...	Reno
3	20180215	murder	REDACTED REDACTED REDACTED	SQL City
4	20180215	murder	Someone killed the guard! He took an arrow to ...	SQL City
...
1223	20180430	bribery	\n	Garden Grove
1224	20180430	fraud	'Why not?' said the March Hare.\n	Houma
1225	20180430	assault	\n	Fontana
1226	20180501	assault	be NO mistake about it: it was neither more no...	Trenton
1227	20180115	murder	Security footage shows that there were 2 witne...	SQL City

1228 rows × 4 columns

```
In [7]: query = "SELECT description from crime_scene_report WHERE type = 'murder' AND date = 20180115 AND city = 'SQL City';"
tables = pd.read_sql(query,con)
tables.iloc[0,0]
```

Out[7]: '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".'

```
In [8]: query = "SELECT MAX(address_number), name, license_id, id from person WHERE address_street_name = 'Northwestern Dr';"
tables = pd.read_sql(query,con)
tables
```

Out[8]:

	MAX(address_number)	name	license_id	id
0	4919	Morty Schapiro	118009	14887

```
In [10]: query = "SELECT transcript from interview WHERE person_id = 14887;"
tables = pd.read_sql(query,con)
tables.iloc[0,0]
```

Out[10]: '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".'

```
In [9]: query = "SELECT * from person WHERE address_street_name = 'Franklin Ave' AND name LIKE 'Annabel %';"
tables = pd.read_sql(query,con)
tables
```

Out[9]:

	id	name	license_id	address_number	address_street_name	ssn
0	16371	Annabel Miller	490173	103	Franklin Ave	318771143

```
In [11]: query = "SELECT transcript from interview WHERE person_id = 16371;"
tables = pd.read_sql(query,con)
tables.iloc[0,0]
```

Out[11]: 'I saw the murder happen, and I recognized the killer from my gym when I was working out last week on January the 9th.'

```
In [12]: query = "SELECT * from get_fit_now_member WHERE membership_status = 'gold' AND id LIKE '%48Z%';"
tables = pd.read_sql(query,con)
tables
```

Out[12]:

	id	person_id	name	membership_start_date	membership_status
0	48Z7A	28819	Joe Germuska	20160305	gold
1	48Z55	67318	Jeremy Bowers	20160101	gold

```
In [13]: query = "SELECT * from get_fit_now_check_in WHERE check_in_date = 20180109 AND membership_id LIKE '%48Z%';"
tables = pd.read_sql(query,con)
tables
```

Out[13]:

	membership_id	check_in_date	check_in_time	check_out_time
0	48Z7A	20180109	1600	1730
1	48Z55	20180109	1530	1700

```
In [14]: query = "SELECT * from person WHERE name = 'Jeremy Bowers';"
tables = pd.read_sql(query,con)
tables
```

```
Out[14]:
```

	id	name	license_id	address_number	address_street_name	ssn
0	67318	Jeremy Bowers	423327	530	Washington Pl, Apt 3A	871539279

```
In [15]: cursor = con.cursor()
sql = "INSERT INTO solution VALUES (1, 'Jeremy Bowers')"
cursor.execute(sql)
con.commit()
var = pd.read_sql("SELECT value FROM solution", con)
var.iloc[0,0]
```

```
Out[15]: "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."
```

Asesino 2

```
In [16]: query = "SELECT transcript from interview WHERE person_id = 67318;"
tables = pd.read_sql(query,con)
tables.iloc[0,0]
```

```
Out[16]: '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.\n'
```

```
In [17]: query = "SELECT * from drivers_license WHERE hair_color='red' AND car_make = 'Tesla';"
tables = pd.read_sql(query,con)
tables
```

```
Out[17]:
```

	id	age	height	eye_color	hair_color	gender	plate_number	car_make	car_model
0	202298	68	66	green	red	female	500123	Tesla	Model S
1	291182	65	66	blue	red	female	08CM64	Tesla	Model S
2	736081	79	69	brown	red	male	GCAQ6Y	Tesla	Model S
3	918773	48	65	black	red	female	917UU3	Tesla	Model S

```
In [24]: query = "SELECT person_id, COUNT(*) from facebook_event_checkin WHERE event_name = 'SQL Symphony Concert' AND date LIKE '201712%' GROUP BY person_id HAVING COUNT(*) == 3"
tables = pd.read_sql(query,con)
tables
```

```
Out[24]:
```

	person_id	COUNT(*)
0	24556	3
1	99716	3

```
In [18]: query = "SELECT * from person where id = 99716"
tables = pd.read_sql(query,con)
tables
```

```
Out[18]:
```

	id	name	license_id	address_number	address_street_name	ssn
0	99716	Miranda Priestly	202298	1883	Golden Ave	987756388

```
In [19]: query = "SELECT * FROM income WHERE ssn = 987756388"
tables = pd.read_sql(query, con)
tables
```

```
Out[19]:
```

	ssn	annual_income
0	987756388	310000

```
In [25]: cursor = con.cursor()
sql = "INSERT INTO solution VALUES (1, 'Miranda Priestly')"
cursor.execute(sql)
con.commit()
var = pd.read_sql("SELECT value FROM solution", con)
var.iloc[0,0]
```

```
Out[25]: '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!'
```