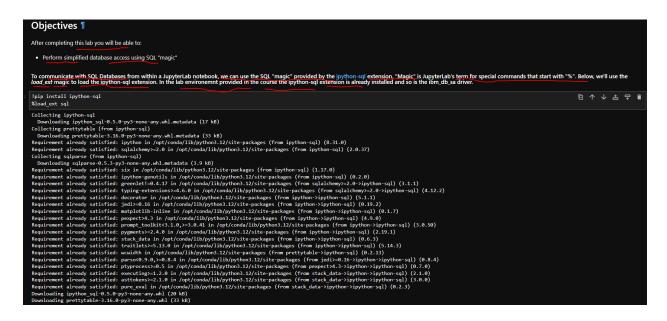
Hands-on Tutorial: Accessing Databases with SQL magic





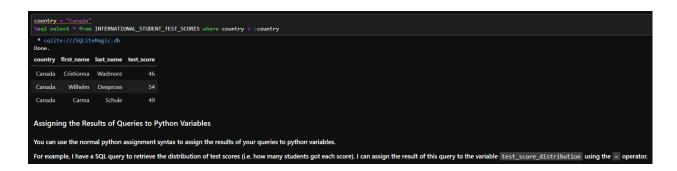
```
CREATE TABLE INTERNATIONAL_STACKING_TEST_SCORES (
    country WAKCHAN(GS),
    last_name WAKCHAN(GS),
    last_name,
    last_name,
```

```
(!Indomesia', 'Goralyn', 'Gandins', 48),
('China', 'Deame', 'Eddinson', 45),
('China', 'Georgiana', 'Esple', 51),
('Portugal', 'Earlet', 'Bresez', 50),
('Ascrabajan', 'Idalina', 'Lukash', 50),
('Fance', 'Livvie', 'Blany', 'Sh,
('Malaysia', 'Monis', 'Sorit', 48),
('Malaysia', 'Monis', 'Sorit', 48),
('Ralaysia', 'Monis', 'Sorit', 48),
('Ralaysia', 'Monis', 'Sorit', 48),
('Polland', 'Valentia', 'Monoth', 50),
('Rowan', 'Satinlah', 'Moditt', Sh),
('Polland', 'Valentia', 'Monoth', 50),
('Polland', 'Valentia', 'Monoth', 50),
('Rowan', 'Satinlah', 'Moditt', Sh),
('Chora', 'Sirvinan', 'Sorit', 'And,
('China', 'Linnan', 'Gartuard', 41),
('Gantanal', 'Tameny', 'Valentia', '44),
('Gantanal', 'Tameny', 'Valentia', '44),
('Granc', 'Alma', 'Zavittiard', 44),
('Granc', 'Alma', 'Zavittiard', 44),
('Granc', 'Alma', 'Tawit', '48),
('Fanca', 'Alma', 'Tawit', '48),
('Granc', 'Kalma', 'Indomes', '39),
('Ginia', 'Kalma', 'Indomes', '48),
('Gha', 'Walsay', 'Lyma', '31),
('Gha', 'Walsay', 'Lyma', '33),
('Ghomesia', 'Kip', 'Nothersall', 48),
('Panma', 'Kemith', 'Oigance', 48),
('Satiteraland', 'Dany', 'Galligan', 49),
('Palland', 'Fancy', 'Shape', 'Shap
```

```
('Russia', 'Benjamen', 'Kenford', 51),
('China', 'Etan', 'Burn', 53),
('Russia', 'Merralee', 'Chaperlin', 38),
('Canda', 'Wilhelm', 'Deeprose', 54),
('Cach Republic', 'Lara', 'Hallm', 49),
('China', 'Ossie', 'Woodley', 52),
('Macedonia', 'April', 'Tyer', 50),
('Wistnam', 'Madelon', 'Dansey', 53),
('Ukraine', 'Korella', 'McNamee', 52),
('Ukraine', 'Korella', 'McNamee', 52),
('China', 'Mart', 'Coling', 52),
('China', 'Mart', 'Coling', 52),
('China', 'Berni', 'Daintiem', 55),
('China', 'Berni', 'Daintiem', 55),
('China', 'Brain', 'Caushey', 40),
('Canada', 'Carma', 'Schule', 40),
('Canada', 'Carma', 'Schule', 40),
('China', 'Maure', 'Janda', 'All, '
```

```
## Install ipython-sql* and *prectytable* Libraries using pip
|pip install ipython-sql prectytable

## Import the *prectytable* Library, which is used to display data in a formatted_table*
| ## Import the *prectytable* Library, which is used to display data in a formatted_table* Library table* Library* Libra
```



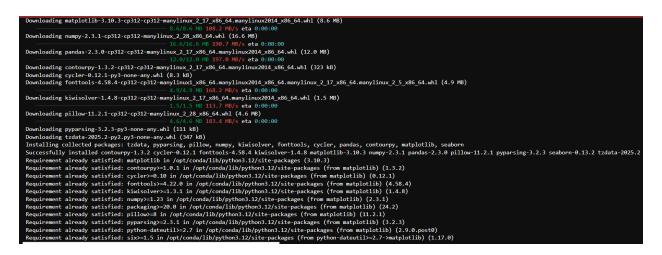
Done.	
Test_Score	Frequency
38	
40	
43	
44	
45 46	8 7
46	4
48	14
49	8
50	10
51	8
53	8
54	
55	
56	
58	

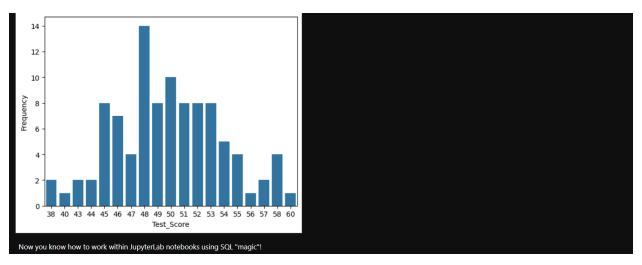
```
Converting Query Results to DataFrames

You can easily convert a SQL query result to a pandas dataframe using the DataFrame() method. Dataframe objects are much more versatile than SQL query result objects. For example, we can easily graph our test score distribution after converting to a dataframe.

Ipip install assistance

Ipip install assist
```





%%sql			
Feel free to SELECT country,			
* sqlite:///SQLiteMagic.db Done.			
country	first_name	last_name	test_score
United States	Marshall	Bernadot	54
Ghana	Celinda	Malkin	
Ukraine	Guillermo	Furze	53
Greece	Aharon	Tunnow	48
Russia	Bail	Goodwin	46
Poland	Cole	Winteringham	49
Sweden	Emlyn	Erricker	55
Russia	Cathee	Sivewright	49
China	Barny	Ingerson	
Uganda	Sharla	Papaccio	
China	Stella	Youens	51
Poland	Julio	Buesden	48
United States	Tiffie	Cosely	58
Poland	Auroora	Stiffell	45
China	Clarita	Huet	52
Poland	Shannon	Goulden	45
Philippines		Privost	50
France		Burk	49
China	Saunderson	Root	58
Indonesia	Во	Waring	

Russia			
	Robbie	Collip	46
Philippines	Davon	Donisi	46
China	Cristabel	Radeliffe	48
China	Wallis	Bartleet	58
Moldova	Arleen	Stailey	38
Ireland	Mendel	Grumble	58
China	Sallyann	Exley	
Mexico	Kain	Swaite	46
Indonesia	Alonso	Bulteel	
Armenia	Anatol	Tankus	
Indonesia	Coralyn	Dawkins	48
China	Deanne	Edwinson	45
China	Georgiana	Epple	
Portugal	Bartlet	Breese	56
Azerbaijan	Idalina	Lukash	
France	Livvie	Flory	54
Malaysia	Nonie	Borit	48
Indonesia	Clio	Mugg	
Brazil	Westley	Measor	48
Philippines	Katrinka	Sibbert	
Poland	Valentia	Mounch	
Norway	Sheilah	Hedditch	
Papua New Guinea	Itch	Jubb	
Latvia	Stesha	Garnson	

Canada	Cristionna	Wadmore	46
China	Lianna	Gatward	43
Guatemala	Tanney	Vials	48
France	Alma	Zavittieri	44
China	Alvira	Tamas	50
United States	Shanon	Peres	45
Sweden	Maisey	Lynas	
Indonesia	Kip	Hothersall	46
China	Cash	Landis	48
Panama	Kennith	Digance	45
China	Ulberto	Riggeard	48
Switzerland	Judy	Gilligan	49
Philippines	Tod	Trevaskus	
Brazil	Herold	Heggs	44
Latvia	Verney	Note	50
Poland	Temp	Ribey	50
China	Conroy	Egdal	48
Japan	Gabie	Alessandone	47
Ukraine	Devlen	Chaperlin	54
France	Babbette	Turner	51
Czech Republic	Virgil	Scotney	52
Tajikistan	Zorina	Bedow	49
China	Aidan	Rudeyeard	50
Ireland	Saunder	MacLice	48
France	Waly	Brunstan	53

China	Gisele	Enns	52
Peru	Mina	Winchester	48
Japan	Torie	MacShirrie	50
Russia	Benjamen	Kenford	
China	Etan	Burn	53
Russia	Merralee	Chaperlin	38
Indonesia	Lanny	Malam	49
Canada	Wilhelm	Deeprose	54
Czech Republic	Lari	Hillhouse	48
China	Ossie	Woodley	
Macedonia	April	Tyer	50
Vietnam	Madelon	Dansey	
Ukraine	Korella	McNamee	52
Jamaica	Linnea	Cannam	
China	Mart	Coling	52
Indonesia	Marna	Causbey	
China	Berni	Daintier	
Poland	Cynthia	Hassell	49
Canada	Carma	Schule	49
Indonesia	Malia	Blight	48
China	Paulo	Seivertsen	
Niger	Kaylee	Hearley	54
Japan	Maure	Jandak	46
Argentina	Foss	Feavers	
Venezuela	Ron	Leggitt	60

Ru	ıssia	Flint	Gokes	40
C	hina	Linet	Conelly	
Philipp	ines Nil	kolas	Birtwell	
Aust	ralia Ed	uard	Leipelt	