Discussion 12

If you haven’t already done so.

Pip install matplotlib

Matplotlib

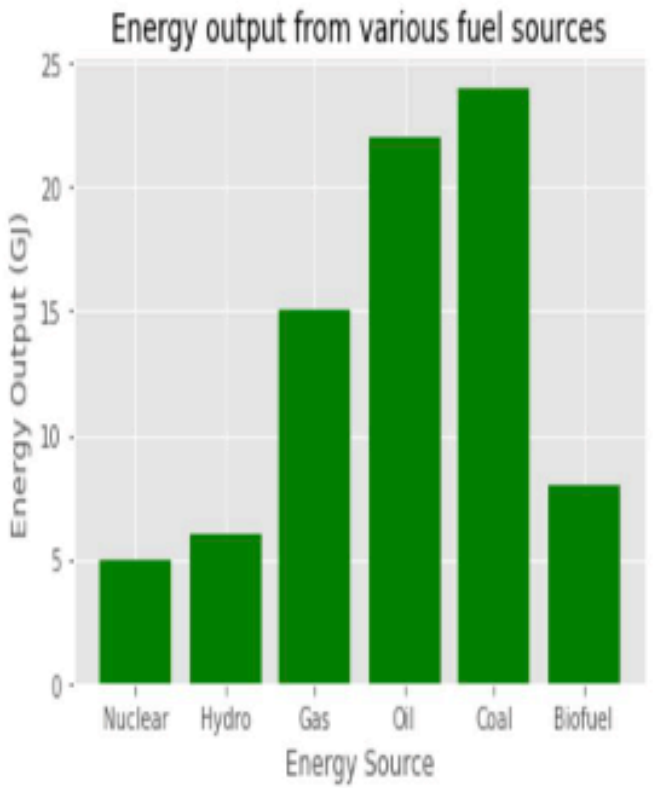
```
x = ['Nuclear', 'Hydro', 'Gas', 'Oil', 'Coal', 'Biofuel']
energy = [5, 6, 15, 22, 24, 8]

x_pos = [i for i, _ in enumerate(x)]

plt.bar(x_pos, energy, color='green')
plt.xlabel("Energy Source")
plt.ylabel("Energy Output (GJ)")
plt.title("Energy output from various fuel sources")

plt.xticks(x_pos, x)

plt.show()
```



Tips

Plan and then code

IF NOT EXISTS -> Update the database

DROP TABLE IF EXISTS -> Rewrite the database

Check your database

If your data is huge, limit your data to make sure your code works before implementing the code

Use resources like inspect element, jsoneditoronline, regex101

Task 1

- Grab Data from https://en.wikipedia.org/wiki/Grand_Slam_(tennis)
- Just the names from the men's and women's singles

Tournaments [edit]

Event	Dates	Venue	Surface	Current champion(s)				
				Men's Singles	Women's Singles	Men's Doubles	Women's Doubles	Mixed Doubles
Australian Open	mid/late January	Melbourne Park, Melbourne	Hard	Novak Djokovic	Naomi Osaka	Ivan Dodig Filip Polášek	Elise Mertens Aryna Sabalenka	Barbora Krejčíková Rajeev Ram
French Open	late May/ early June	Stade Roland Garros, Paris	Clay	Rafael Nadal	Iga Świątek	Kevin Krawietz Andreas Mies	Tímea Babos Kristina Mladenovic	Latisha Chan Ivan Dodig
Wimbledon	late June/ early July	All England Lawn Tennis and Croquet Club, London	Grass	Novak Djokovic	Simona Halep	Juan Sebastián Cabal Robert Farah	Hsieh Su-wei Barbora Strýcová	Latisha Chan Ivan Dodig
US Open	late August/ early September	USTA Billie Jean King National Tennis Center, New York City	Hard	Dominic Thiem	Naomi Osaka	Mate Pavić Bruno Soares	Laura Siegemund Vera Zvonareva	Bethanie Mattek-Sands Jamie Murray

Task 2

Create a tennis.db table called tennis with the name and number_of_wins columns using only Men's singles and Women's singles

	name	wins
	Filter	Filter
1	Novak Djokovic	2
2	Naomi Osaka	2
3	Iga Świątek	1
4	Kevin Krawietz	1
5	Simona Halep	1
6	Hsieh Su-wei	1

Task 3

- Create a visualization using matplotlib
- X = name
- Y = number_of_wins