

# Discussion 12

If you haven't already done so.

**Pip install matplotlib**

# Matplotlib

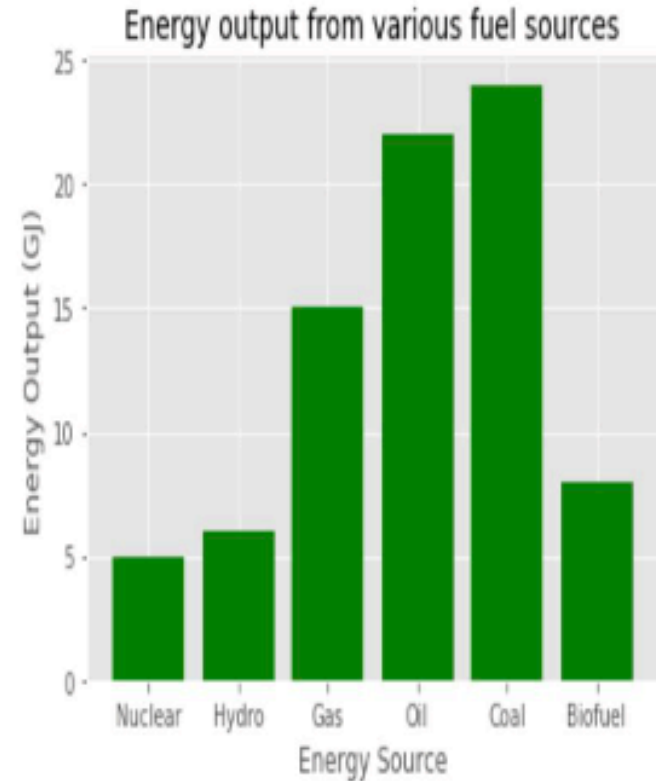
```
x = ['Nuclear', 'Hydro', 'Gas', 'Oil', 'Coal', 'Biofuel']
energy = [5, 6, 15, 22, 24, 8]

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\\_\(tennis\)](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
<b>Australian Open</b>	mid/late January	Melbourne Park, Melbourne	Hard	 Novak Djokovic	 Naomi Osaka	 Ivan Dodig  Filip Polášek	 Elise Mertens  Aryna Sabalenka	 Barbora Krejčíková  Rajeev Ram
<b>French Open</b>	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
<b>Wimbledon</b>	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
<b>US Open</b>	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
- $X = \text{name}$
- $Y = \text{number\_of\_wins}$

