# Why do we do those Python exercises?

#### **Overview**

The objective is this class is **not** to turn you into seasoned programmers, but rather to ensure that you gain some hands-on experience with Google Colab and Python. Here's why...

# Understanding the Role of NLTK and Python in This Class

- Not Becoming Programmers: The goal is not to turn you into expert programmers
- Understanding Concepts: Grasp the basics of NLP and Python for real-world applications.
- Notebooks as Templates: for reuse in future projects.
- **Skill Over Memorization**: The aim is to acquire practical skills, not to memorize NLTK functions or Python code.

## 1. Data Analysis and Interpretation

- Importance: We live in a data-driven world. Basic skills in data analysis are indispensable.
- How Python Helps: With Python, students can conduct simple to complex data evaluations.

### 2. Automation

- Importance: Many repetitive business tasks can be automated through simple Python scripts.
- Benefit: This saves time and resources, allowing managers to focus on more strategic tasks.

# 3. Understanding Technology

- Importance: A basic understanding of programming helps in better assessing the possibilities and limitations of technology.
- Benefit: This is crucial for decision-making and communication with technical teams.

# 4. Flexibility

- Importance: Google Colab offers a cloud-based platform that's easily accessible and doesn't require any special hardware.
- Benefit: Students can run and even share their scripts from anywhere, facilitating collaboration.

## 5. Templates and "Paint-by-Numbers"

- Importance: Utilizing existing Python templates allows students to create customizable solutions for a wide range of business questions.
- How It Works: The concept of "paint-by-numbers" applies here; students don't need to understand every detail but should be able to apply templates meaningfully to new problems.

#### 6. Marketable Skills

- Importance: Even basic Python skills are a valuable addition to a resume today.
- **Benefit**: It shows that the candidate has a proactive learning attitude and is willing to look beyond their specialized field.

## 7. Cost-Efficiency

• Importance: Both Python and Google Colab are free, making them a cost-effective way for students to gain valuable skills.

#### **Conclusion**

Engaging with Google Colab and Python not only enhances technical skills but also fosters **analytical thinking**, **problem-solving abilities**, and effective **cross-disciplinary communication**.