**Week 0:**

Basics of Python: [Python Tutorial - Python Full Course for Beginners (youtube.com)](https://www.youtube.com/watch?v=_uQrJ0TkZlc)

**Week 1:**

NLP in Python: [NLP Tutorial Python - YouTube](https://www.youtube.com/playlist?list=PLeo1K3hjS3uuvuAXhYjV2lMEShq2UYSwX)

**(Additional Material)**

Transformers overview: <https://www.analyticsvidhya.com/blog/2019/06/understanding-transformers-nlp-state-of-the-art-models/>

Code + Mathematics of Transformers: [Transformers from scratch - YouTube](https://www.youtube.com/playlist?list=PLTl9hO2Oobd97qfWC40gOSU8C0iu0m2l4)

**Week 2:**

Langchain: [Get started | 🦜️🔗 Langchain](https://python.langchain.com/docs/get_started)

**Assignment 1**: Try to build a chatbot by uploading a pdf file → extracting text → converting text into chunks and work embeddings → storing in vector database → retrieving chunks based on similarity score wrt to query input by user → provide the context to the LLM

**Week 3:**

Streamlit Part 1: [How to Create and Deploy Apps in Python with Streamlit - Complete Tutorials - YouTube](https://www.youtube.com/playlist?list=PL2VXyKi-KpYtZzm1K8UKnnBzsOCtekhKq) **(you can skip last 3 videos)**

Streamlit Part 2: [Python Streamlit Full Course - YouTube](https://www.youtube.com/playlist?list=PLa6CNrvKM5QU7AjAS90zCMIwi9RTFNIIW) **(watch from video 43 - 44)**

Follow this Colab to run streamlit from colab: <https://colab.research.google.com/drive/1dgt861k7HR5c6AvwArc4z422gBnAsO9X?usp=sharing>

**Assignment 2**: Make a interface for a chatbot, which have a sidebar to upload multiple PDF files, with chatbot like interface.

**WEEK 4:**

**Final Project Part 1**: Build a custom chatbot for PDF files

(my colab file): [(Updated) Chat\_With\_Multiple\_PDFs\_Streamlit\_App.ipynb - Colaboratory (google.com)](https://colab.research.google.com/drive/13YcT8_Li8F9u1juMPSuNu7_UmPzrjQAr#scrollTo=XUJdeYlAniFS)

**Final Project 2:** Build a custom chatbot for YouTube Videos

(my colab file): [Chatbot\_for\_Youtube\_Videos\_in\_Streamlit.ipynb - Colaboratory (google.com)](https://colab.research.google.com/drive/15B30fFM0BDgrYRxzIW8gOLXFETcbX1JQ#scrollTo=FZ1KJJVH4Nbe)