## Week 1

Day 1: Getting Started with Python (Setup + Introduction to Python)  Setting up a Python development environment with Anaconda and learning the basics of Jupyter Notebook for interactive programming. Introduction to the Python language for machine learning.	Anaconda Installation (Blog) Windows Mac OS All OS	Jupyter Tutorial (Video) Jupyter Notebook tutorial	Python Tutorial (Video) Python Tutorial Till 1:55:50 (Till Lists) Till 3:44:37 (Optional)  Pop up: Chapters to skip: 00:11:24 How Long It Takes To Learn Python 01:16:17 Weight Converter Program 01:24:07 Building a Guessing Game 01:30:51 Building the Car Game
Data Structures in Python  Covers the basic data structures required to get started with machine learning.	Python Data Structures -I Lists, Sets, Tuples (Blog) Blog	Python Data Structures -II Dictionaries (Blog) Blog	Data Structures Practice (Notebook) Notebook Link
Numpy  Introduction to Numpy, the scientific computing library of Python. This will help you in doing heavy mathematical calculations	Numpy Tutorial (Video) <u>Numpy Video</u>	Numpy Tutorial (Blog) Numpy Tutorial Blog	Numpy Practice (Notebook) Practice Notebook  Kaggle Solutions Kaggle Notebook
Pandas Introduces pandas, a Python package built on Numpy which is most commonly used to handle tabular data and provides several tools that	Pandas Tutorial (Video) <u>Pandas Video</u>	Pandas Tutorial (Notebook) Pandas Notebook Tutorial  Pop up: Skip Question no. 22,23	Pandas Micro Course Pandas Kaggle Micro Course

simplify working with the data.			
Data Visualization using Matplotlib  Data Visualization helps us understand the information's meaning by giving it visual context through different graphs or maps.	Data Visualization and Introduction to Matplotlib Tutorial  Matplotlib Data for Visualization  Pop up: By Dr. Neeraj Sharma from DSAI, IITG Ignore 1.2 Plotting for Analysis	Matplotlib Tutorial (Detailed Blog) Matplotlib Blog	Matplotlib Tutorial (Notebook) Matplotlib Notebook Tutorial
Bonus Section : Covers Object Oriented Programming and tools to visualize data through charts and heatmaps.	Python OOPs Python OOPs Till 03:19:32	Linear Algebra with Numpy Linalg	Data Visualization using Seaborn and Plotly (Video) Seaborn Plotly

## Numpy Assignment:

https://drive.google.com/drive/folders/1nVVtohkT9ioemtXaP0KaDt4070nms0Uh?usp=sharing

## Pandas Assignment:

https://drive.google.com/drive/folders/1SteBMmCwoopOwhHkfV4gzrlzc\_VYzF-e?usp=sharing

Quiz: Will be Live on 24th May