SESSION PLAN DAY 3	
Session name	Manipulating Data using NumPy

Learning Outcomes

The concept will introduce how to manipulate matrices using the NumPy library in Python. Matrices are fundamental representations of data for many machine learning applications. In this concept, you will learn

- Arrays in NumPy
- Creating NumPy arrays
- Indexing and Slicing NumPy arrays
- Applying NumPy hands-on

Prerequisites for the Student

- Manipulating Data using NumPy

Student Activities

- Different Ways to Create Numpy Arrays like one dimensional, two dimensional, an identity matrix.
- Perform Operations on Weather Dataset.
- Actively Listening
- Overview of Manipulating Data using NumPy
    - What are Arrays?
    - Indexing and Slicing
    - Vectorization(Operations with Numpy array) & Broadcasting
- Practice problems on Arrays, Indexing and Slicing, Vectorization and Broadcasting.
    - Refer the GitHub repo for problems
- Quiz on Manipulating Data using NumPy.
- Questions and Discussion on doubts - AMA

Next Session

- Concept - Manipulating Data with Numpy
- Key topics to be highlighted - highlight where they would need to spend more time and importance w.r.t Data Science.
    - Arrays in NumPy
    - Creating NumPy arrays
    - Indexing and Slicing NumPy arrays
    - Applying NumPy hands-on