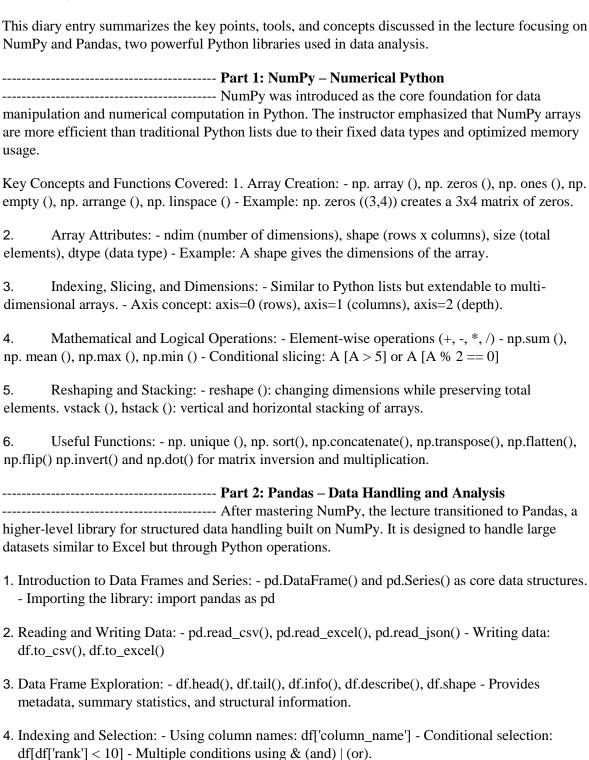
Training Day 8 Report

Date: 4 July 2025



- 5. Filtering, Sorting, and Grouping: df.sort_values(by='column', ascending=True) df.filter(items=['country', 'population']) String-based filtering: df['country'].str.contains('United')
- 6. Practical Example: World Population Dataset Columns included: Rank, Country, Continent, Population (various years) Tasks performed: Identifying top 10 most populated countries. Filtering based on continent. Sorting by population in ascending/descending order. Calculating mean and total population.

-- The lecture provided a comprehensive foundation for handling data in Python. NumPy introduced efficient numerical computing and array manipulations, while Pandas built upon it to enable high-level data analysis, filtering, and transformation similar to Excel but far more powerful. The key takeaway was that understanding arrays, data frames, and data manipulation operations are essential for advanced analytics and data science workflows.