# Techniques Used in NLP Project

## 1. Dataset Handling

- Loaded dataset (`emotion\_based\_conversation\_filter.xlsx`) using Pandas.  
- Displayed the first few rows to inspect the data.  
- Checked for and handled missing values.

## 2. Exploratory Data Analysis (EDA)

- Counted the distribution of emotions using `collections.Counter`.  
- Visualized emotion distributions with:  
 \* Bar Chart: Using Matplotlib to show the frequency of emotions.  
 \* Pie Chart: Showing the percentage distribution of emotions.

## 3. Text Preprocessing

- Cleaned and standardized text by:  
 \* Converting to lowercase.  
 \* Removing extra whitespace.  
- Stored the processed text in a new column (`Cleaned\_Text`).

## 4. Data Filtering

- Implemented a function to filter conversations based on a specific emotion.  
- Demonstrated filtering for conversations labeled with the emotion `'Joy'`.