Lab 1 Report - Corpus Construction

1. Objective

To construct a structured news corpus from a real-world dataset for use in subsequent NLP tasks.

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2. Dataset

Fake and Real News Dataset (Kaggle)
Files used:

- `Fake.csv`
- `True.csv`
  Each file contains news articles with title and text fields.

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3. Methodology

1. Loaded both CSV files using Pandas.
2. Assigned binary labels:
   - Fake → 0
   - Real → 1
3. Merged datasets into a single DataFrame.
4. Removed short or empty articles.
5. Randomly sampled 5000 articles.
6. Saved the structured corpus as:
   - `news_corpus.jsonl`
   - `news_corpus.csv`

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4. Final Dataset Structure

Column	Description
title	News headline

Column	Description
text	Article content
label	0 (Fake), 1 (Real)

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5. Conclusion

A clean, labeled, and structured corpus was successfully created.
This dataset will be used for preprocessing, sentiment analysis, and machine learning tasks in subsequent labs.

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Corpus created successfully!
                                                title  \
0  German Social Democrats face pressure over coa...
1  U.S. diplomatic delays, Trump agenda snarl Ita...
2  Trump taps Retired General Kelly to lead Homel...
3   Texas Republicans Cut Environmental Regulatio...
4  Trump attacks FBI on leakers of Russia reports...

                                                text  label
0  BERLIN (Reuters) - Germany s Social Democrats ...      1
1  ROME (Reuters) - Italy’s preparations for host...      1
2  WASHINGTON (Reuters) - Republican U.S. Preside...      1
3  A disgusting black sludge is coming out of res...      0
4  WASHINGTON (Reuters) - U.S. President Donald T...      1
```

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6. Git Link:-

(Lab 1 - Git)[https://github.com/MYTH-il/NLP/blob/main/lab1_corpus.ipynb]