Assignment 1

Follow the classification example in Chapter 6 in Hands-On Generative AI with Transformers and Diffusion Models and extend it in the following ways:

1. Perform an error analysis based on the fine-tuned DestilBert model on the AG News dataset.

2. Fine-tune a ModernBert model (answerdotai/ModernBERT-base) in a similar fashion as DestilBert was fine-tuned in the chapter.

3. Compare the test set performance of the two fine-tuned models.

4. Perform an error analysis on the AG News based on the fine-tuned ModernBert and compare it to DestilBert.

Attach your Jupyter notebook as an appendix. Include only code relevant to solving the problems.