## Report

Firstly, the dataset was downloaded from the provided link.

The dataset was extensive, so it was trimmed down to 5000 randomly selected entries.

Then, the 'text' and 'summary' columns were preprocessed, involving stemming and lemmatization, stop words removal, etc.

Then, the 'gpt2' model and tokenizer were initialized, and a custom class was created to initialize the dataset and fine-tune it. Several hyperparameters were tried to get the best possible result.

The best possible results were obtained with the following set of hyperparameters:

Optimizer: Adam

Epocs: 3

Learning Rate: 1e-6

Batch-size: 4

Train-Test-Split: 75:25

After training, the rouge tests gave the following average scores:

rouge1\_precision: 0.503 rouge2\_precision: 0.099 rougeL\_precision: 0.464