**Lexper Assignment Report**

# Task

The task is to implement a simple PI web server that determines whether a given sentence is grammatically appropriate by using CoLA data among GLUE task.

# Approach

Using pre-trained transformer-based models then fine-tuning on CoLA dataset with classification task from GLUE benchmark.

## Pre-trained Model

* Bert
* DistilBert
* BART

## Fine-tuning Metric

* Matthew Correlation Coefficient (MCC), as the number of positive and negative samples in validation set of CoLA dataset are imbalanced.

## Training Detail

* Number of epochs: 3
* Batch size: 32
* GPU: <https://colab.research.google.com>.

# Result

MCC score of 3 selected models on CoLA validation set:

* Bert: 0.54
* DistilBert: 0.477
* BART: 0.53

As a result, Bert is selected as the pre-trained model to be serviced.

# Git Link

<https://github.com/minhson-kaist/lexper-assignment.git>

# Screen Capture



