**Requirements**:

* The files include a requirements.txt. Before using it, please remove any Torch-related entries and install Torch separately, tailored to your hardware configuration.
* Alternatively, you can install libraries based on the dependencies in helper\_functions.py.

**Adjusting Training Data**:

* To create a smaller training dataset, you can use the following command to clip the data:

*head -n 12801 train\_150\_integer\_from\_dream2022\_train\_expression.txt > train\_12801.txt*

This generates a training dataset with 12,800 samples (excluding the header line). You can modify the sample count by changing the number. I currently don't have an optimal number; feel free to share your suggestions.

**Workflow**:

**a.** Load the data into a Pandas DataFrame.

**b.** Convert the DataFrame to a DataLoader using create\_dl().

**c.** Initialize your model, criterion, optimizer, and scheduler.

**d.** Create a trainer using create\_trainer().

**e.** Run the training loop with trainer.run().

Basically, you can just run the jupyter notebook to see how it works.

**Model Specifications**:

* Your custom model should expect input data with dimensions (batch\_size, 4, 150).
* The output should have dimensions (batch\_size, 18).