- References:
    - Handwritten equations to LaTeX
    - On Machine Understanding of Online Handwritten Mathematical Expressions
    - Image-to-Markup Generation with Coarse-to-Fine Attention
- Download dataset of 85 diffirent math symbols in handwriting from Kaggle
  -> folder ‘extracted_images’
- Create dataset of mathematical formulas by Generator
    - Extracting 23 symbols [‘0’, ‘1’, ‘2’, ‘3’, ‘4’, ‘5’, ‘6’, ‘7’, ‘8’, ‘9’, ‘-’, ‘+’, ‘=’, ‘leq’, ‘neq’, ‘geq’, ‘alpha’, ‘beta’, ‘lambda’, ‘lt’, ‘gt’, ‘x’, ‘y’] from Kaggle’s dataste
    - Normalization of symbols -> folder **normalized**
        - Removing the border
        - Scale to at most 40 × 40
        - Center the mass in a 48 × 48 image
        - Subtract mean and divide by standard deviation
    - Combining symbols to easy formula -> folder **formulas**
- Generate sequences
    - Available files: source
        - train_images_std.npy

        - train_images_mean.npy
        - Latex/Latex.py
        - Seq2SeqModel/Seq2SeqModel.py
        - seq_mod/
    - Generate latex sequences from filenames using Sequence-to-sequence model

      -> output files: **oseq_n.npy, iseq_n.npy, files.json**

-> output files: drive

- Train and test the seq2seq model: https://github.com/Wikunia/HE2LaTeX/blob/master/Seq2Seq.ipynb

  train in ~ 5 hours -> Accuracy on test set ~ 62%

- To be continue