Due on April 27, 2020
Seoul National University

Homework 4

INSTRUCTIONS

- The homework is due at 9:00am on April 27, 2020. Anything that is received after that time will be considered to be late and we do not receive late homeworks. We do however ignore your lowest homework grade.
- Homeworks need to be submitted electronically on ETL. Only PDF generated from LaTex is accepted.
- Make sure you prepare the answers to each question separately. This helps us dispatch the problems to different graders.
- Collaboration on solving the homework is allowed. Discussions are encouraged but you should think about the problems on your own.
- If you do collaborate with someone or use a book or website, you are expected to write up your solution independently. That is, close the book and all of your notes before starting to write up your solution.

1 Setup [0 points]

1. In this homework, we will build and experiment with convolution networks, intialization, and regularizers. You must use Google Colab, which provides free GPUs.

2. For this homework, we will use subset of tasks from cs231n from Stanford.

3. First, upload hw4 files to your Google Drive.

4. If you are a 컴맹, I suggest you watch this Workflow tutorial video for the overview setup process.

5. Note, you need to make sure to properly set the path to the Drive files. I've attached my example path in the following figure.
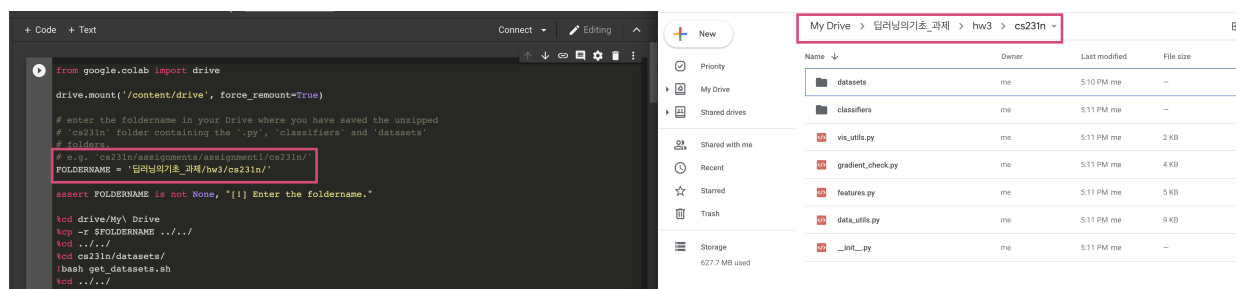

Figure 1: Make sure to set the path appropriately.

6. Ensure you are periodically saving your notebook (File → Save), and any edited .py files relevant to that notebook (i.e. by executing the last code cell) so that you don't lose your progress if you step away from the assignment and the Colab VM disconnects.

7. Once you have completed all Colab notebooks except collect_submission.ipynb, open collect_submission.ipynb in Colab and execute the notebook cells. This notebook/script will:

   - Generate a zip file of your code (.py and .ipynb) called hw4.zip.
   - Convert the notebook into a single PDF file.

8. Submit the resulting PDF and the zip file to ETL.

2   Convnets [100 points]

Follow and complete `PyTorch.ipynb`.