

0.

Review:

In NN code we shown in class, there are some points that you need to understand.

- a. **Tanh** and the corresponding derivative.
- b. axis and **keepdims**
- c. bp in coding
- d. **NO NEED** to know Softmax yet. We'll meet that again in CNN.
But you NEED to understand after 5 weeks.

1.

Coding:

Please do review the code what we have met in course.

If you choose to use python, please make sure your code in modern Python's Way.

If you choose to use C++, please make sure you can code what we've told in C++ without hesitating.

Never forget to do coding exercise with Leetcode or Lintcode.

【You needn't to hand in this part. But please be honest to yourself.】

2.

Reading:

We were not talking about the solution of SVM. If you have interests in that, especially in **Lagrange Multiplier (LM)**, try to find out your own solution. If you are too busy to do that, never mind, we'll revisit LM in PCA study.

You have to grab this knowledge in this course. Good Luck!

【You needn't to hand in this part. But please be honest to yourself.】

3.

Preparation:

Have you ever forgotten our target for a very single moment? Our dream is to do CV by leveraging the advantages of CNN. So, here are some questions for you:

- a. Have you installed PyTorch with Anaconda?
- b. Have you installed Caffe successfully?

- c. Have you had an environment to run C++ code with Caffe? [If you believe you are not going to live with C++ & Caffe, then forget about this.]
- d. Have you found out where are your interests lying?
- e. From week 6, we are going to dive into the realm of deep learning authentically. And real projects are coming with that. You still have 2 weeks!

【You needn't to hand in this part. But please be honest to yourself.】