FAQ

1. *Should I implement hyperparameter search in the code or it is fine to test manually?*
   - Due to Colab limitations, it is ok to test hyperparameters by manually changing them in the code

2. *The Discriminator loss doesn't increase*
   - The feature extractor tries to maximize the loss of the discriminator
   - However, the Discriminator is still trying to minimize its own loss

3. *Results with DANN have small or no improvements*
   - Even 1-2% increases on PACS are significative
   - The implementation might not yield adaptation results in this setting
   - Optional things that you can try:
     i. Advanced exponential scheduling for alpha (check DANN paper)
     ii. Different implementations for the discriminator (experiment, check DANN paper)
     iii. Implement the exact AlexNet architecture in pytorch, load pre-trained weights from the original caffe model, adjust inputs to fit pytorch preprocessing ([0-255] -> [0-1], BGR -> RGB)