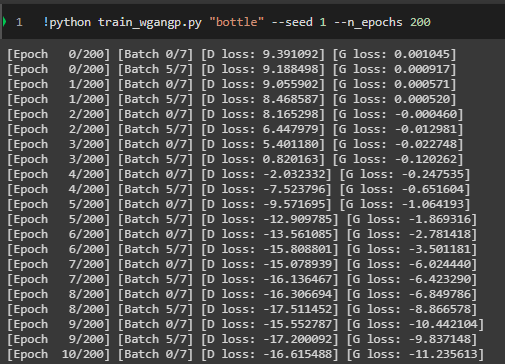
**Exercise f-anoGAN**

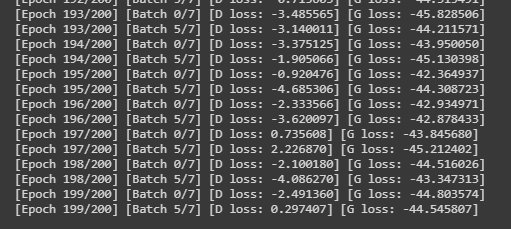
Jirayu Petchhan, D10907801

**Training wgan-gp model (Backbone GANs)**

Training with number of epochs = 200

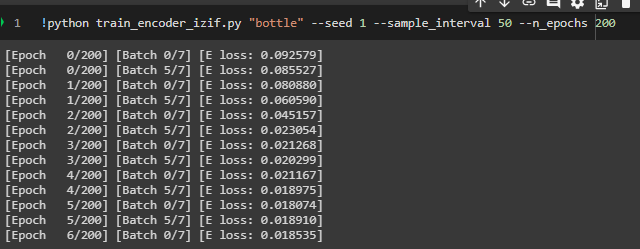


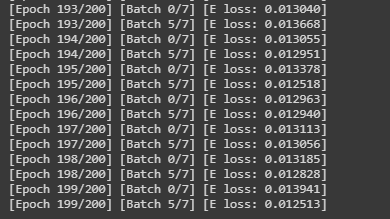
…



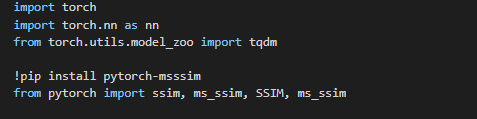
**Then, Training encoder izif model (f-anoGANs)**

Training with **MSE loss** criterion and number of epochs = 200

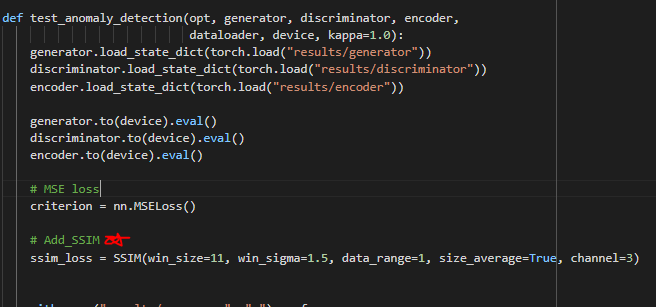




Install package of SSIM.

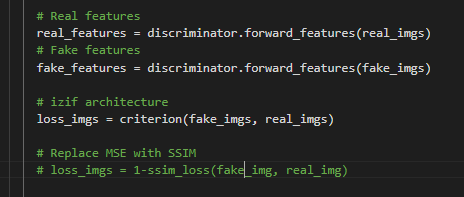


Set up incoming SSIM loss.

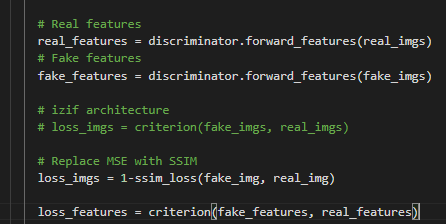


For training iteration

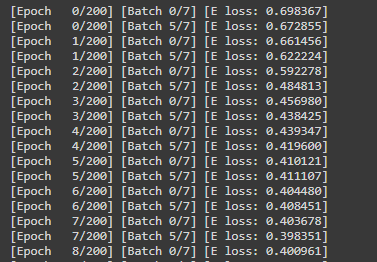
Default **MSE loss**

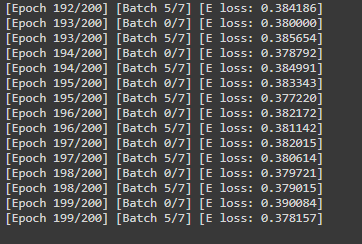


changing criterion to **SSIM\_loss** to find image distance.

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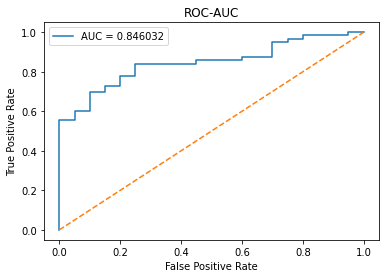
The result from training iteration with **SSIM loss** criterion and number of epochs = 200

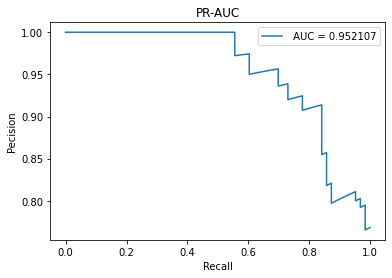


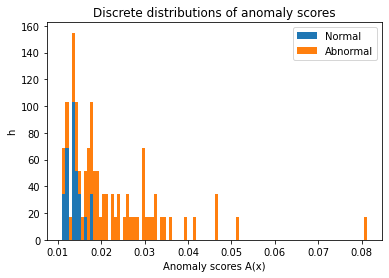


**The results**

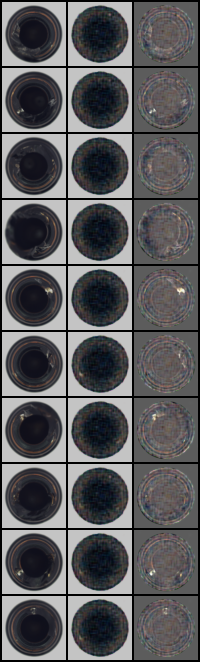
Testing with **MSEloss**



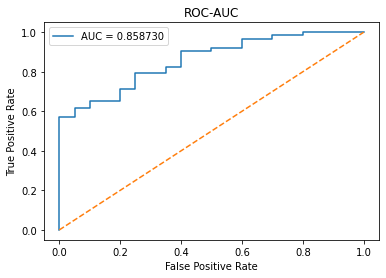


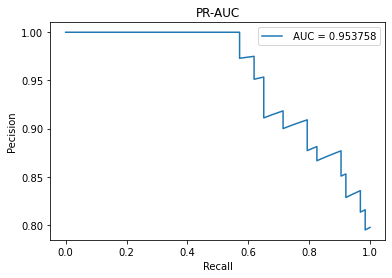


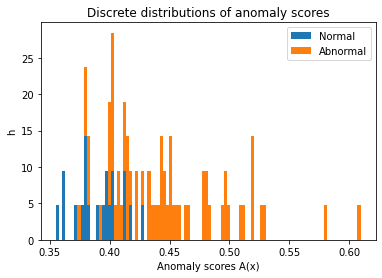
The compared image

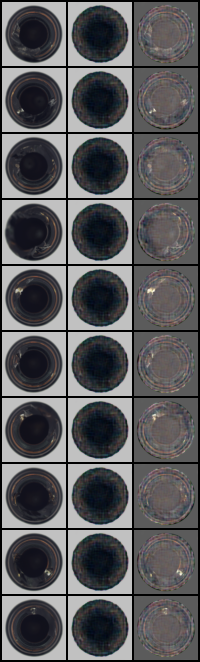


Testing with **MS\_SSIM loss**









**Conclusion**

As the result from training and testing of MSE loss and SSIM loss, we got ROC-AUC and PR-AUC of SSIM loss more than MSE loss (The little value is much better that might be the epochs is a few (200 epochs)).