some notes...

(GANs)

- the idea is:
 1. initialize generator and discriminator weights at random.
 2. train discriminator on to classify actual images against images generated by [untrained] generator.
 3. train generator to generate images that fool discriminator into believing they're real.
 4. train discriminator again on images generated by updated generator.

(Domain Adaptation)

- Assuming you trained a discriminator to distinguish bet features on training & test images and it easily achieved 10 0% accuracy. Discriminator can perfectly tell featrues(train_images) from features(test_domain_images). This impli es that the classifier behaves differently on test data, therefore it overfitted to training data.

N.B. Difference in training and validation is usually a bad sign.