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Answer the following questions briefly (no more than a few sentences), and provide output images where requested.

Show final results from training both your GAN and LSGAN (give the final 4x4 grid of images for both):

GAN (Second Run)



LSGAN (Second Run)



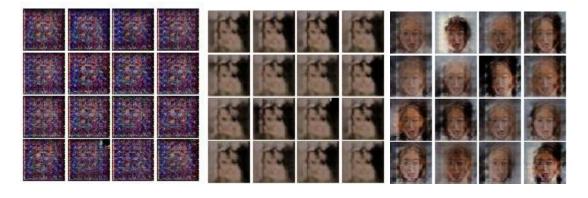
Discuss any differences you observed in the quality of output or behavior during the training of the two GAN models.

In the beginning, it seemed like the GAN network was producing better-looking images. But after so many epoch's it reached a certain point where the quality of the images looks similar to an epoch before but with minor changes made to the output. Where the LSGAN seemed to produce pictures with bad quality early on but as the network continued to train the images started to get better

Do you notice any instances of mode collapse in your GAN training (especially early in training)? Show some instances of mode collapse (if any) from your training output.

In my first run before modifying my loss code, both the GAN and LSGAN experienced mode collapse:

GAN



## LSGAN



Extra credit: If you completed the extra credit for this portion, explain what you did (describing all model changes and hyperparameter settings) and provide output images.