

(c)

Following hyper-parameters were found to perform best after training

Batch size = 16

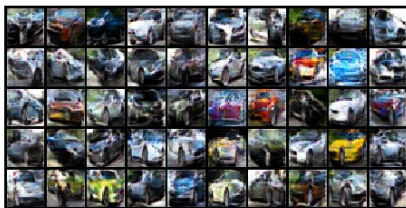
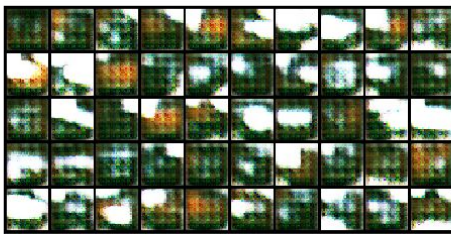
Epochs = 500

Learning rate = 0.001

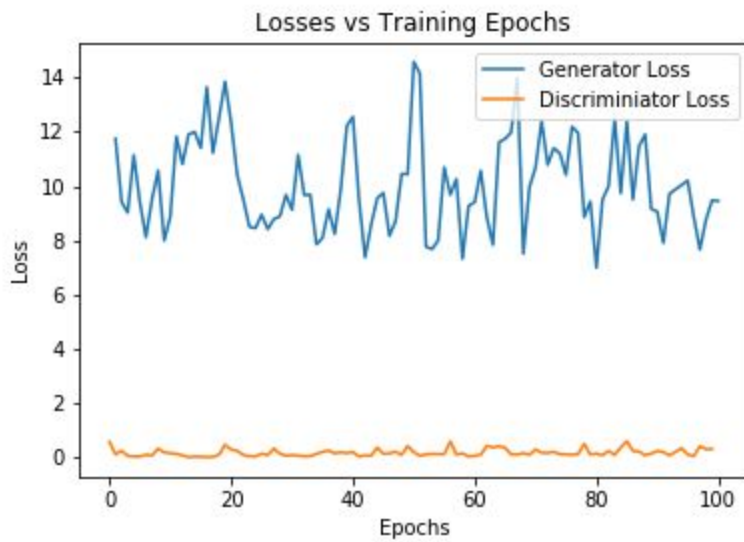
Image size = 32x32

Following are the results of the CNN_GAN after different epochs.

10 epochs, 100 epochs, 200 epochs, and 300 epochs respectively



(f)



There was a crash of the PC while training the model. Due to which plot of 450 epoch was not obtained. This is the plot of Error for a much smaller run tried earlier for 100 epoch and image size 64x64.

(g) After completing the training, the following are the results of 50 generated images of cars.



The Quality of image obtained is decent. The model learns important features such as bonut and wheels of the car.