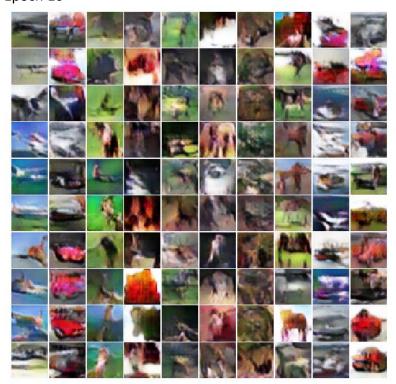
Choose 5-6 pictures of generated images to show how training progresses (for example - epoch 0, 100, 200, 300, 400, 500)

Epoch 0



Epoch 10



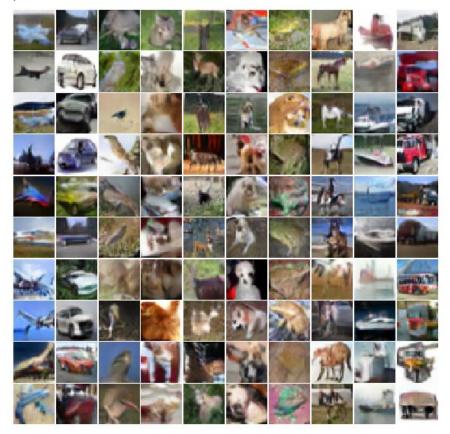
Epoch 50



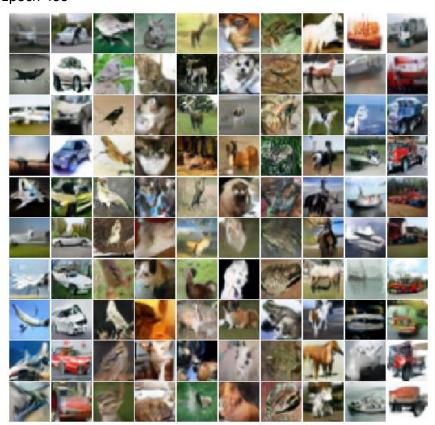
Epoch 100



## Epoch 200

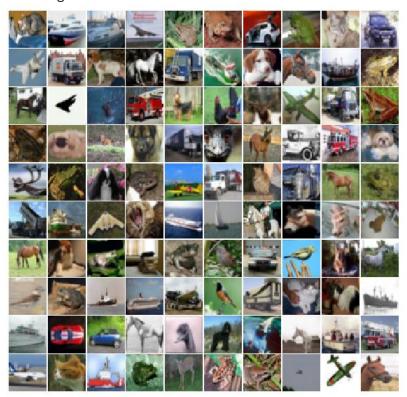


Epoch 400

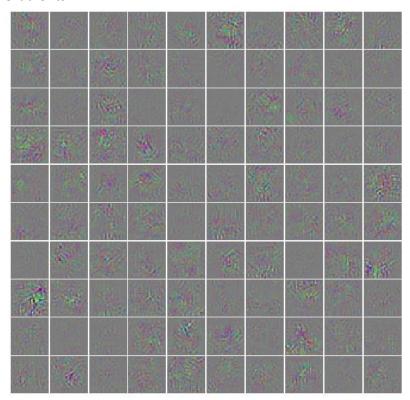


Submit a batch of real images, a batch of the gradients from an alternate class for these images, and the modified images the discriminator incorrectly classifies

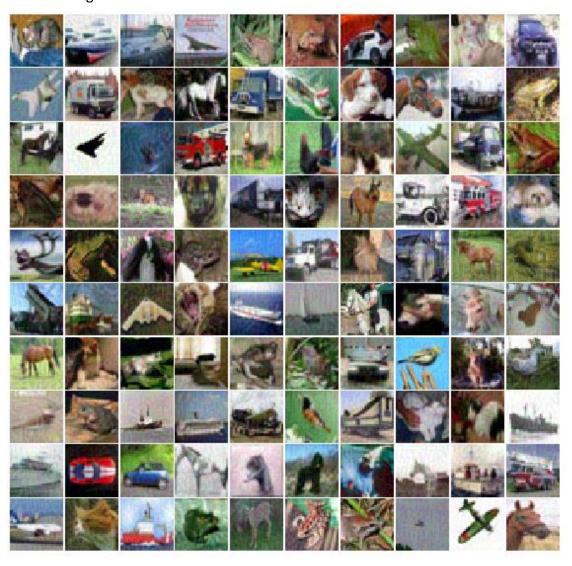
## Real Images



### Gradients

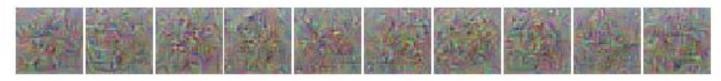


# Modified Images



Submit synthetic images maximizing the class output. One for the discriminator trained without the generator and one for the discriminator trained with the generator.

Discriminator trained without the generator



Discriminator trained with the generator



Submit synthetic images maximizing a particular layer of features. Do this for at least two different layers (for example - layer 4 and layer 8.)

Discriminator trained without the generator **Layer 4:** 



Layer 8:



Discriminator trained with the generator

Layer 4:



### Layer 8:



## Report your test accuracy for the two discriminators.

Batch Size = 64

Number of Features = 128

Discriminator trained without the generator

Number of Epochs: 100 Test Accuracy: 87% Train accuracy: 98%

Discriminator trained with the generator

Number of Epochs: 400 Test Accuracy: 83% Train accuracy: 92%

## **Part 2: Perturb Real Images**

Accuracy on Real Images: 93%

Accuracy on Altered Images: 15%