

## ECE 361E: Homework 3

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## Problem 1

### Question 2

| Model | Training Accuracy(%) | Test Accuracy (%) | Total time for training (s) | Number of Trainable Params | Floating Point Operations | GPU memory during training (mb) |
|-------|----------------------|-------------------|-----------------------------|----------------------------|---------------------------|---------------------------------|
| VGG11 | 97.57                | 76.48             | 3011.79                     | 9,750,922                  | 306587648                 | 1215                            |
| VGG16 | 97.86                | 78.89             | 3622.42                     | 14,655,050                 | 551954432                 | 1425                            |

### Question 3

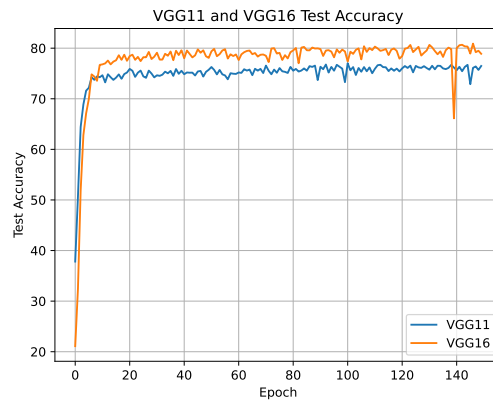


Figure 1: Test Accuracy of VGG11 and VGG16

VGG16 performs better than VGG11 on both train and test. However it has 1.5x the amount of trainable parameters and 1.8x the amount of floating point operations.

## Problem 2

## Problem 3