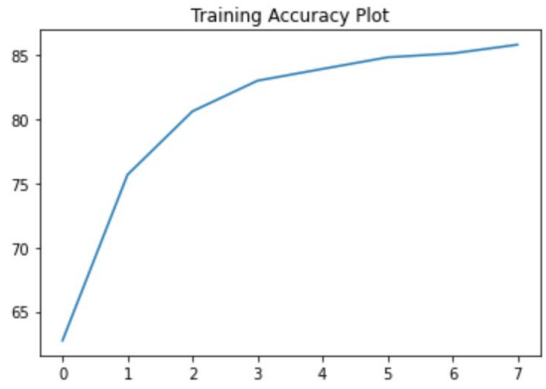
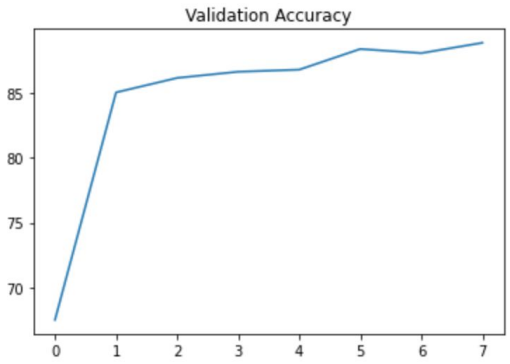
Experiment 1:

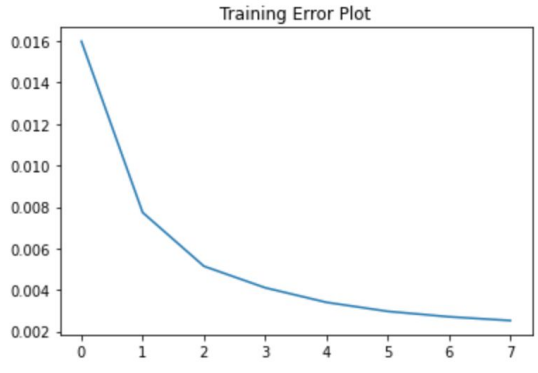
Model: VGG16(No Layer Freezed)
Epochs = 8
Learning Rate = 0.01

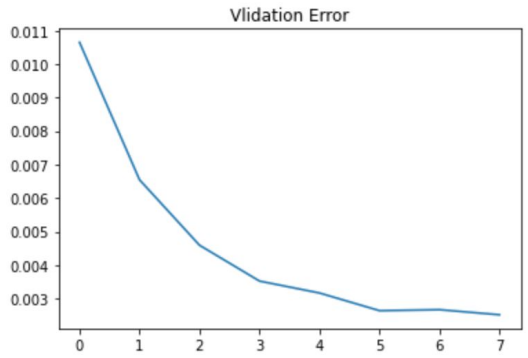
Focal Loss: `gamma=2, alpha=0.25`

```
Best Model Stats:  Validation Accuracy: 88.853503 %
```

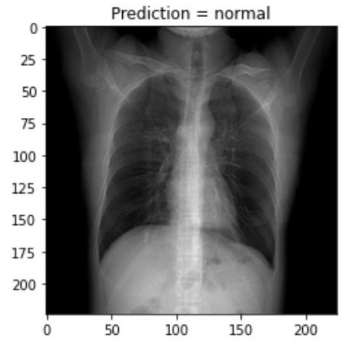




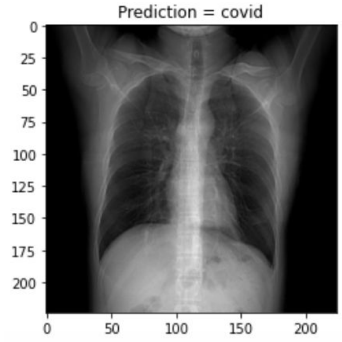





```
Actuall   = Infected
Predicted   =  Normal
```




```
Actuall   = Normal
Predicted   = Infected
```



precision = 0.9071047094852387 Recall = 0.8757812499863159 F1 score = 0.891167769382776

Experiment 2:

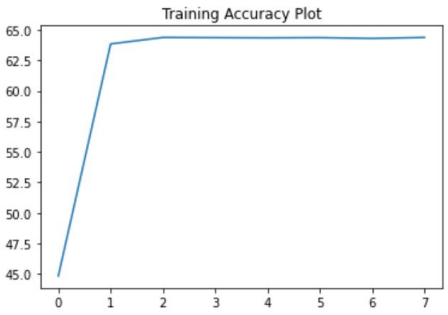
Model: VGG16(All Freezed Layers)

Epochs = 8

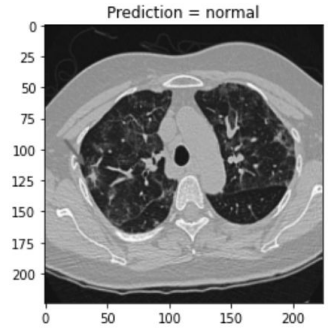
Learning Rate = 0.001

Focal Loss: `gamma=2, alpha=0.25`

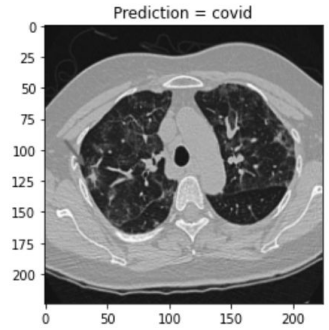
Best Model Stats: Validation Accuracy: 63.694268 %

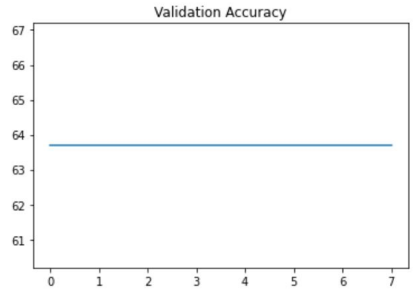


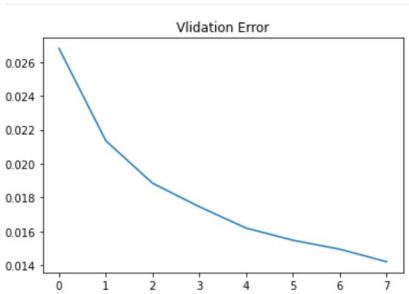
Actuall = Infected
Predicted = Normal



Actuall = Normal
Predicted = Infected







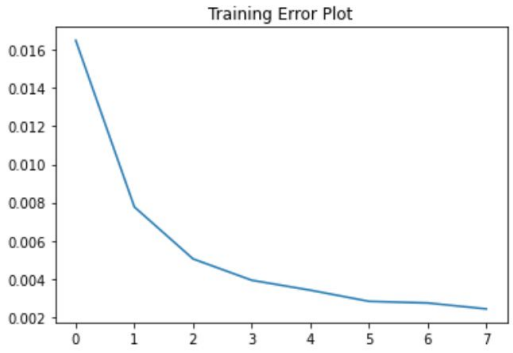
precision = 0.6462035541091082 Recall = 0.6249999999902344 F1 score = 0.6354248904327325

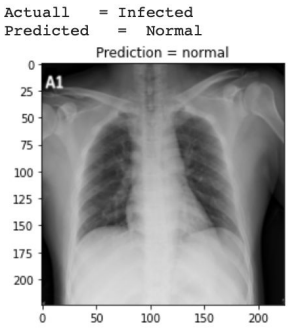
Experiment 3:

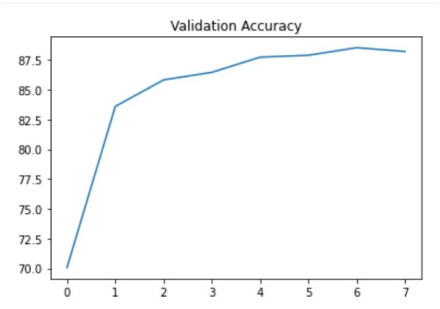
Model: VGG16(Random Layer Freezed)
Epochs = 8
Learning Rate = 0.001

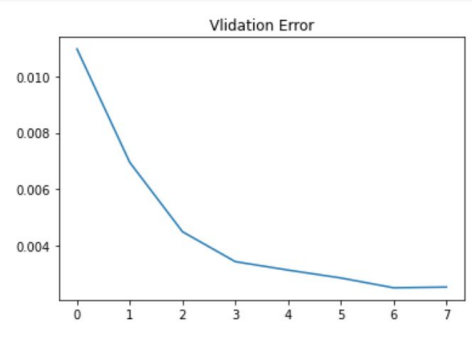
Focal Loss: `gamma=2, alpha=0.25`

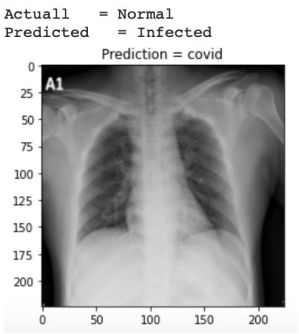
```
Best Model Stats:  Validation Accuracy: 88.535032 %
```









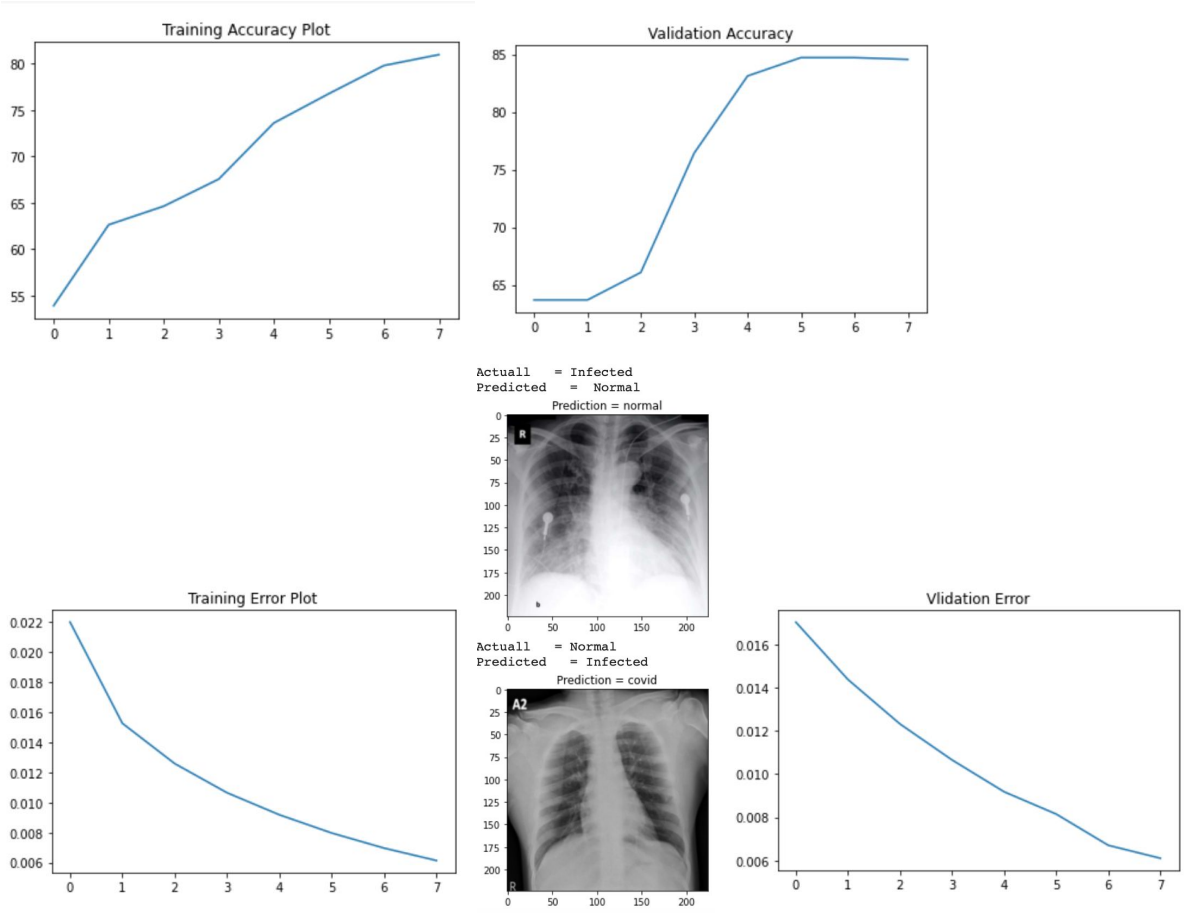



```
precision =  0.9023721155252159 Recall    =  0.8737499999863477 F1 score =
0.8878303858169434
```

Experiment 4:

Model: ResNet18(All Layer Freezed)
Epochs = 8
Learning Rate = 0.01

Focal Loss: `gamma=2, alpha=0.25`
`Best Model Stats: Validation Accuracy: 84.713376 %`

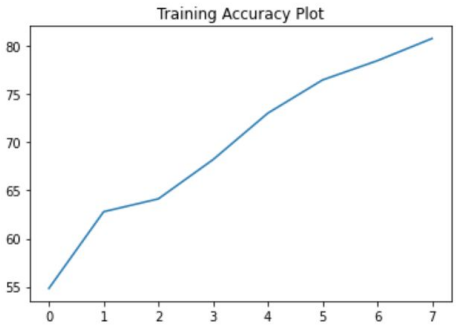


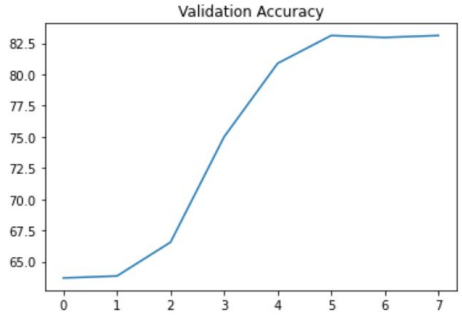
`precision = 0.859170833991625 Recall = 0.832187499986997 F1 score = 0.8454638757076973`

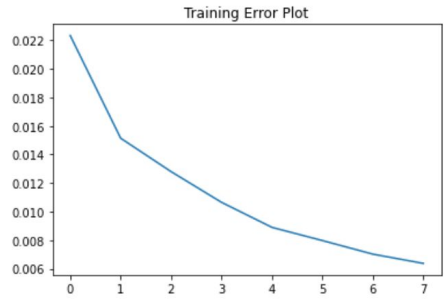
Experiment 5:

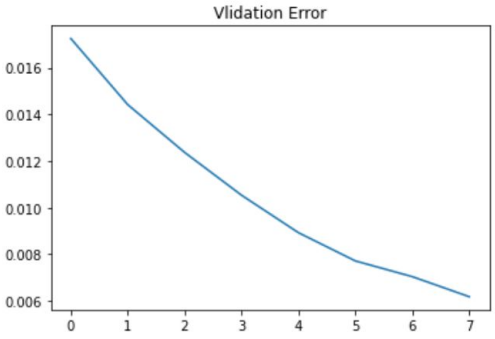
Model: ResNet18(Random Layer Freezed)
Epochs = 8
Learning Rate = 0.01

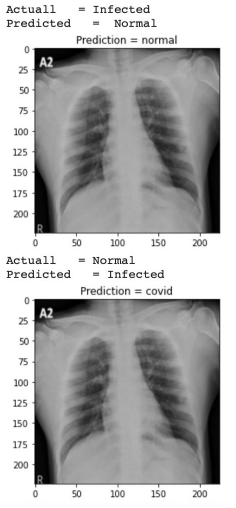
```
Best Model Stats:  Validation Accuracy: 83.121019 %
```












```
precision =  0.8556851311814758 Recall    =  0.8254687499871021 F1 score =
0.8403053420816827
```