**ASSIGNMENT 1**

**Problem 2**

Part A

**Team 4 - Experiment with different parameters you can experiment with a conv-2d layer**

We started with base code to see how parameters work for the model.

1. Changing number of filters

Started with 64 filters to get more details from the input and retained other parameters. Test accuracy is higher than train accuracy and this shows model underfits the train set.

1. Changing filter size to 2\*2

Accuracy decreases to 75% but the difference between train and test accuracies is lower.

1. Changing padding to “valid”

Accuracy increases to 77% and there is less difference between train and test accuracies. No padding is required for these input images.

1. Changing activation to sigmoid

Accuracy decreases to 56%. Relu gives better results than sigmoid.

1. Changing stride value to [2,2] from default [1,1]

Conclusion: Accuracy is at 73% which is not a bad model. Moving one step at a time gives a better result.