Programming Assignment 1

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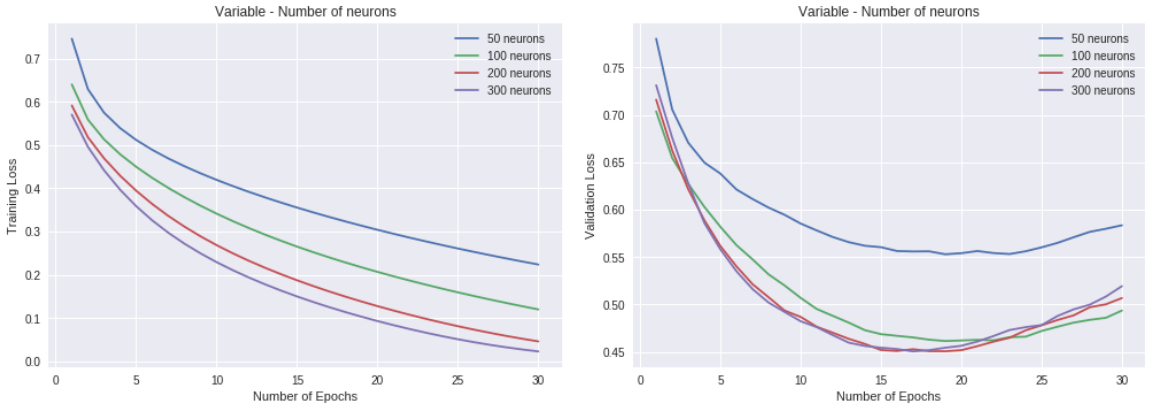
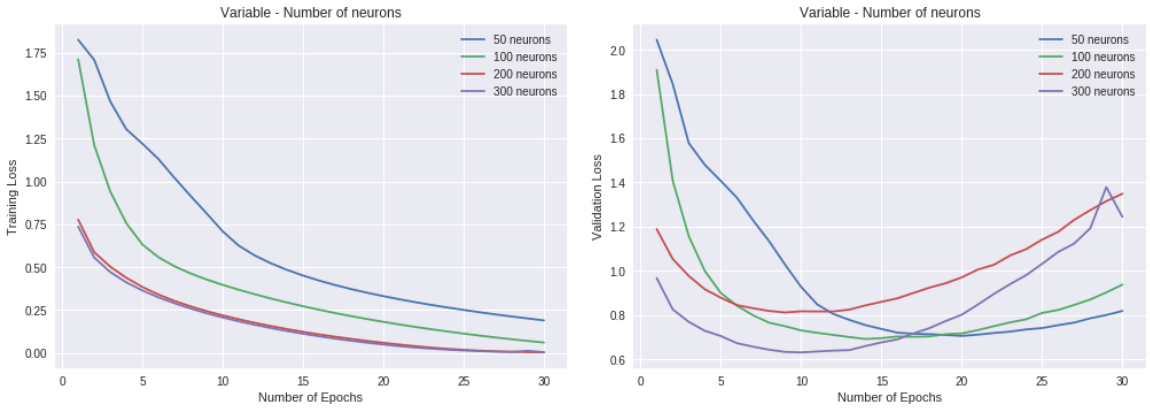
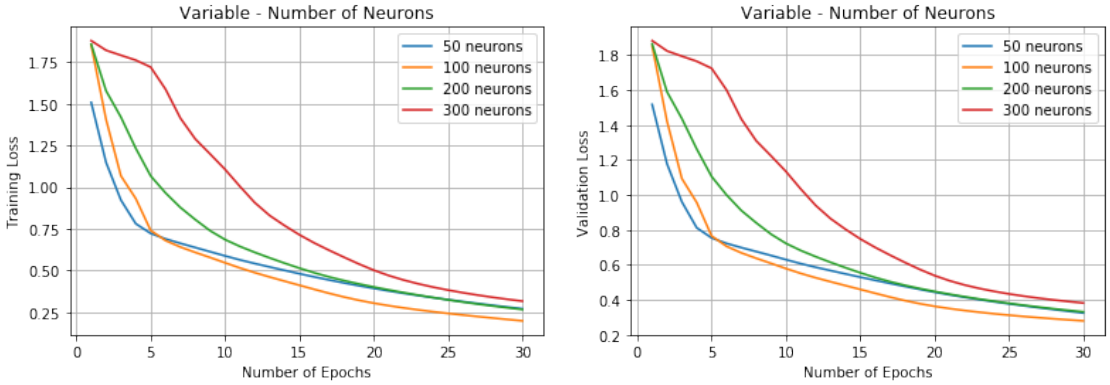
1. **v**arying the size of the hidden layer (50, 100, 200, 300) - [keeping just one hidden layer]



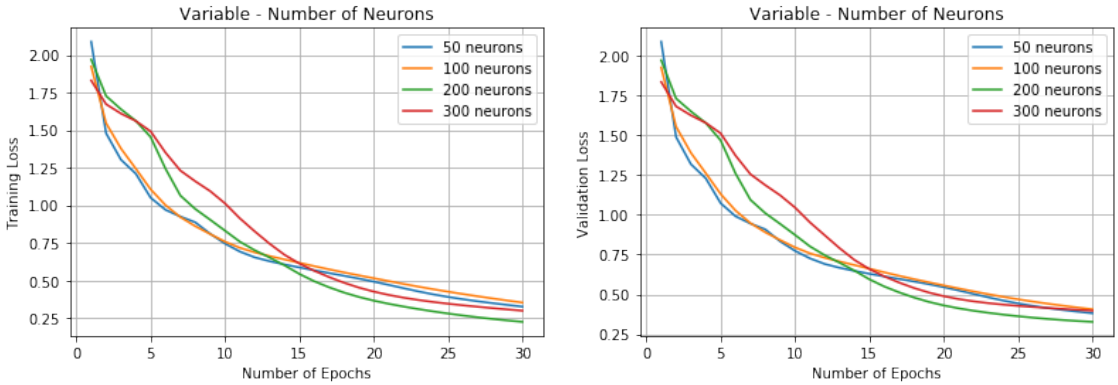
2. **v**arying the size of the hidden layer (50, 100, 200, 300) - [with two hidden layers and the same size for each hidden layer]



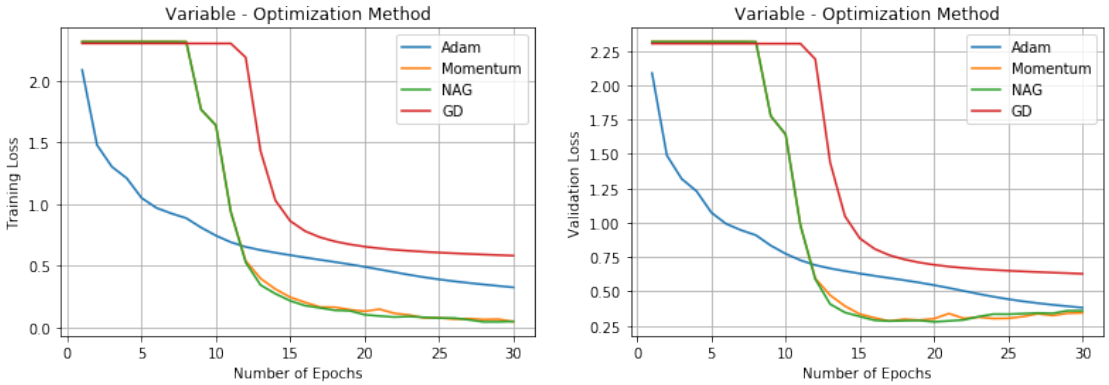
3. **v**arying the size of the hidden layer (50, 100, 200, 300) - [with three hidden layers and the same size for each hidden layer]



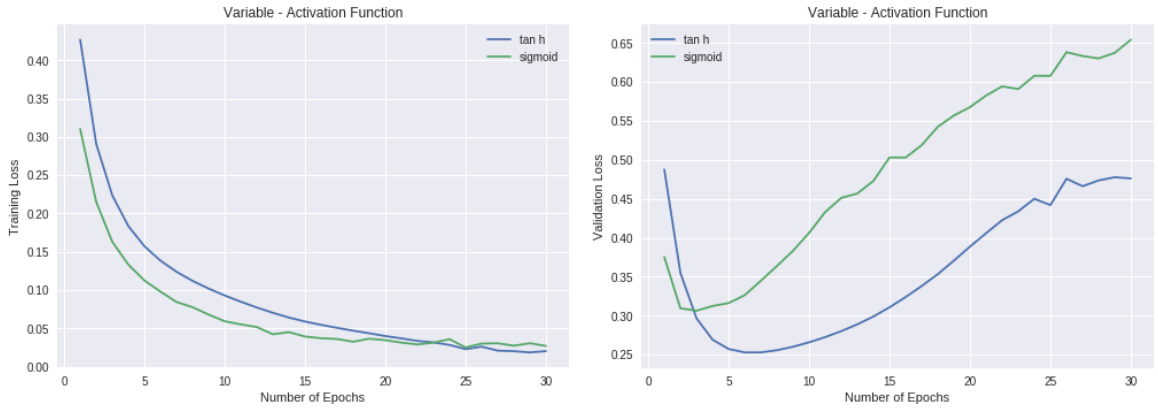
4. **v**arying the size of the hidden layer (50, 100, 200, 300) - [with four hidden layers and the same size for each hidden layer]



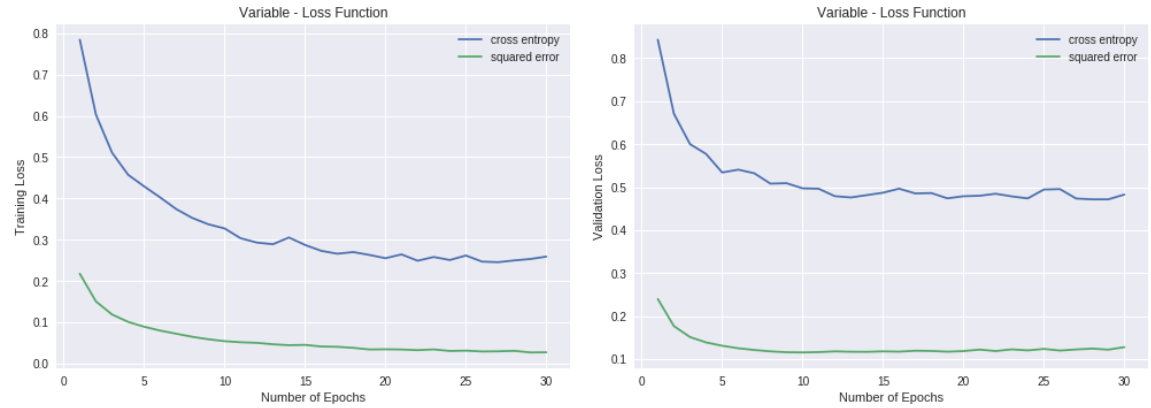
5. **A**dam, NAG, Momentum, GD [with 4 hidden layers and each layer having 300 neurons] (again sigmoid activation, cross entropy loss, batch size 20)



6. **s**igmoid v/s tanh activation [Adam, 2 hidden layers, 100 neurons in each layer, batch size 20, cross entropy loss].



7. **c**ross entropy loss v/s squared error loss [Adam, 2 hidden layers, 100 neurons in each layer, batch size 20, sigmoid activation]



8. **B**atch size: 1,20,100,1000 [Adam, 2 hidden layers, 100 neurons in each layer, sigmoid activation, cross entropy loss]