



Activations and Pooling functions



Group 6



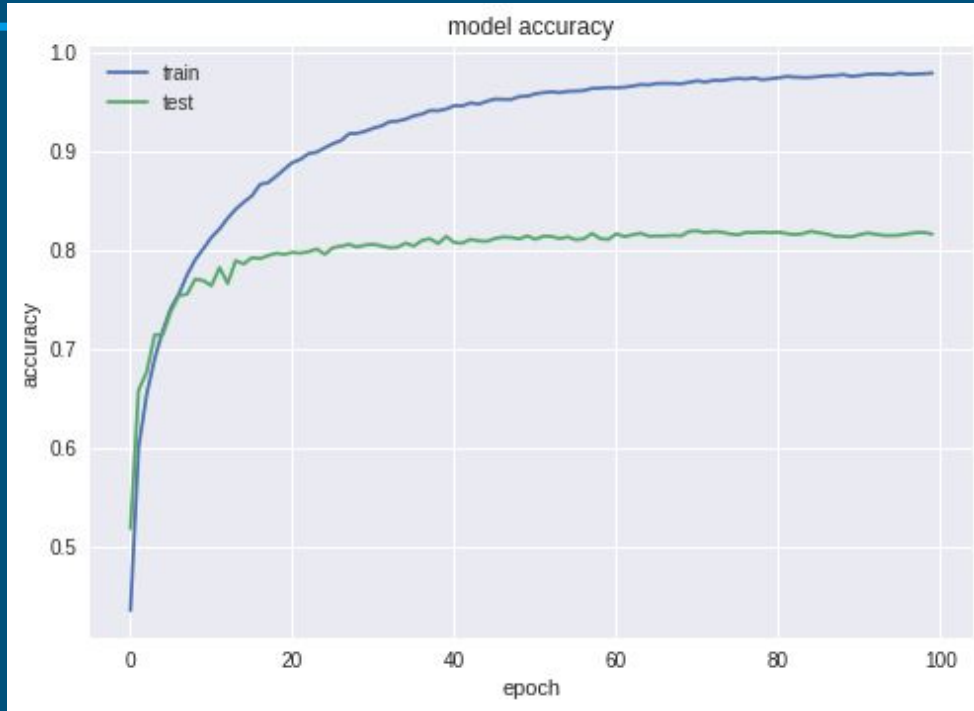
Activation Functions

1. We were investigating the effect of activation functions on the performance of the model.
2. We kept all the other parameters and hyperparameters constant and tested the performance of the model using different activation functions in the input and hidden layers.
3. We kept the output layer activation function as a softmax.
4. Here some of the results we got

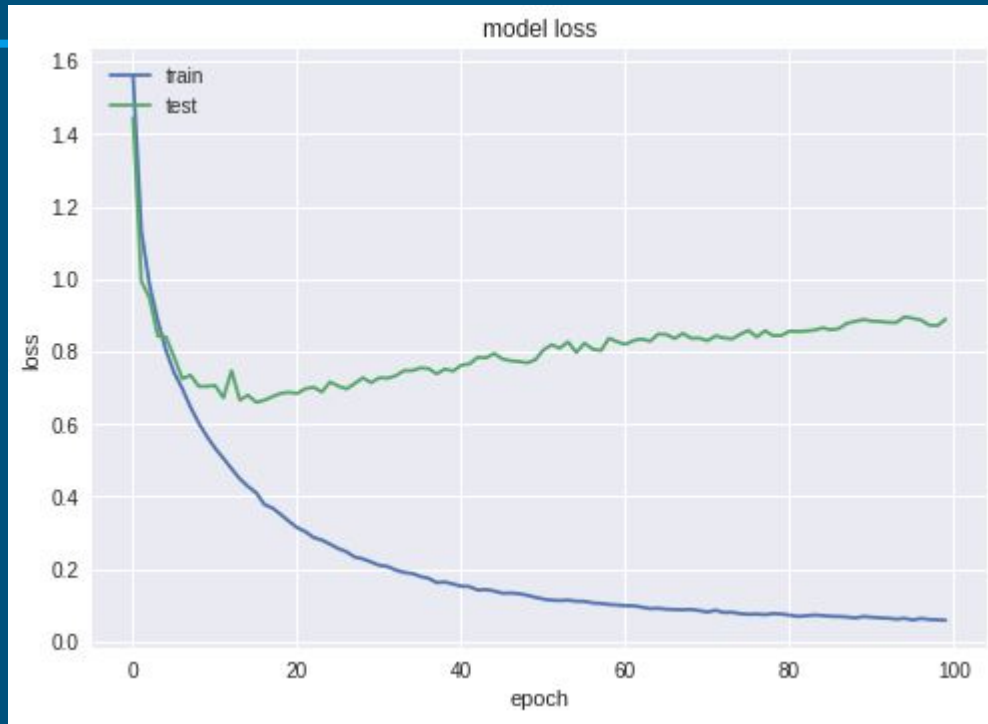
Types of Activation

1. Relu
2. Sigmoid
3. Softmax
4. Tanh
5. elu

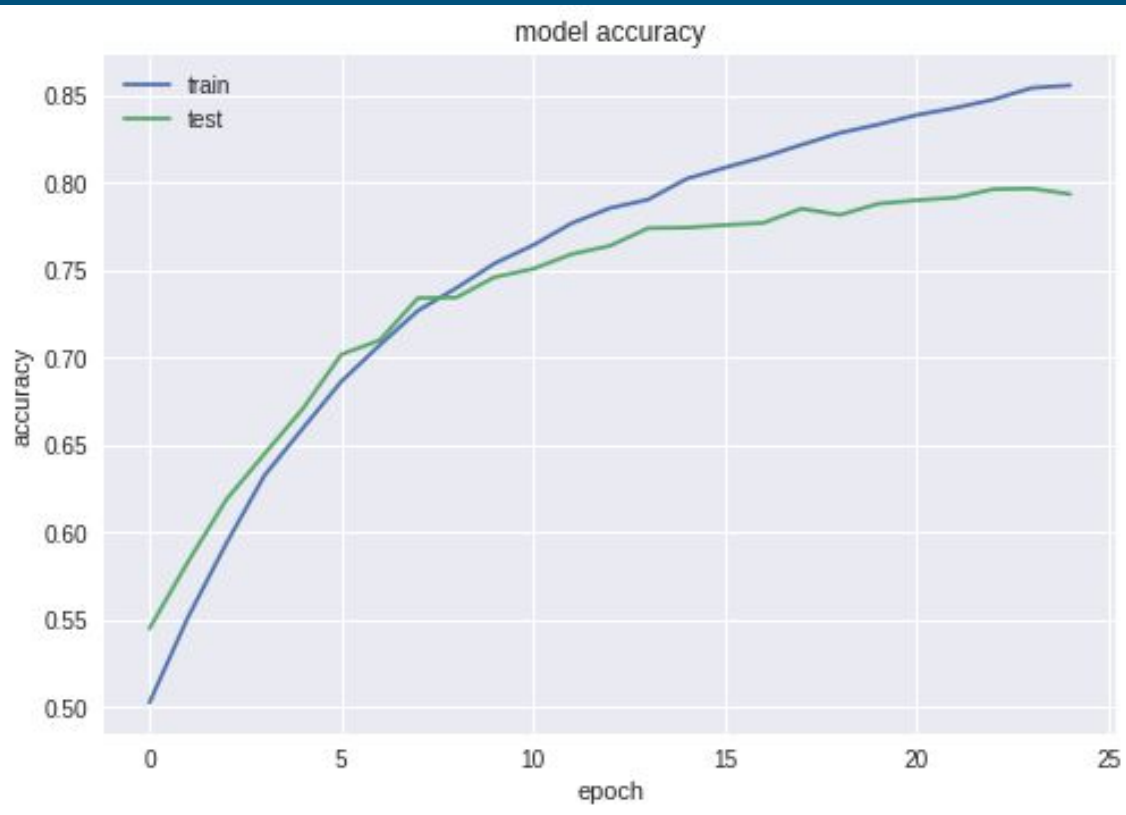
Tanh Activation



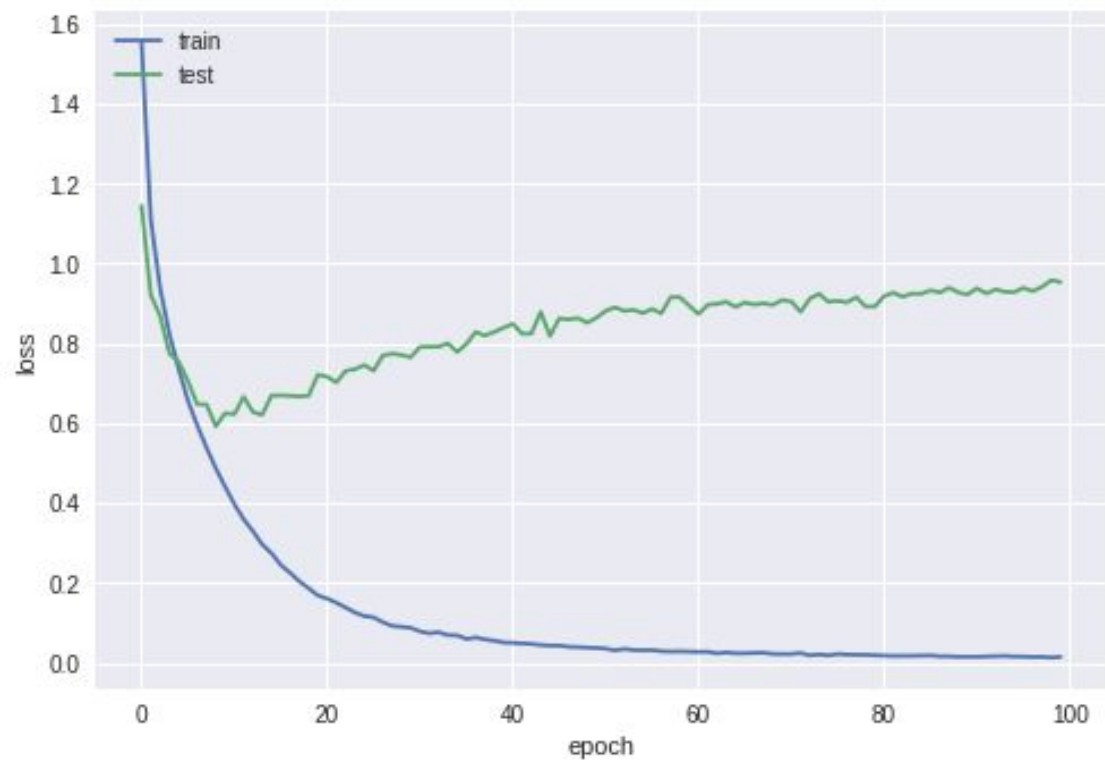
Tanh Activation



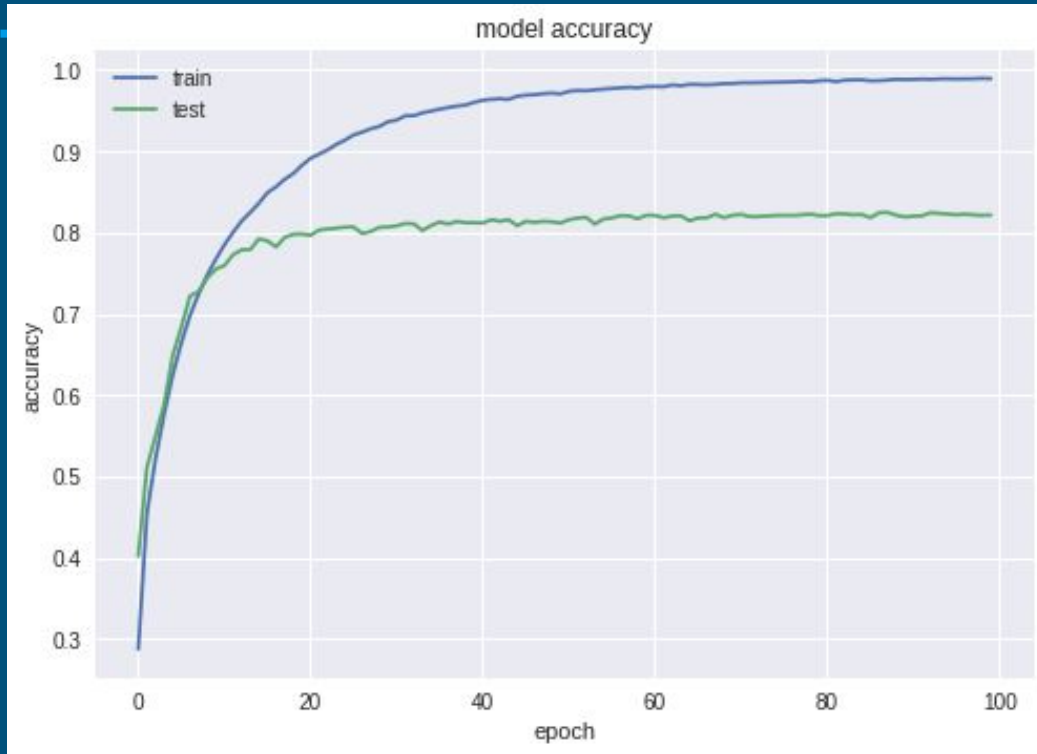
Elu Activation function



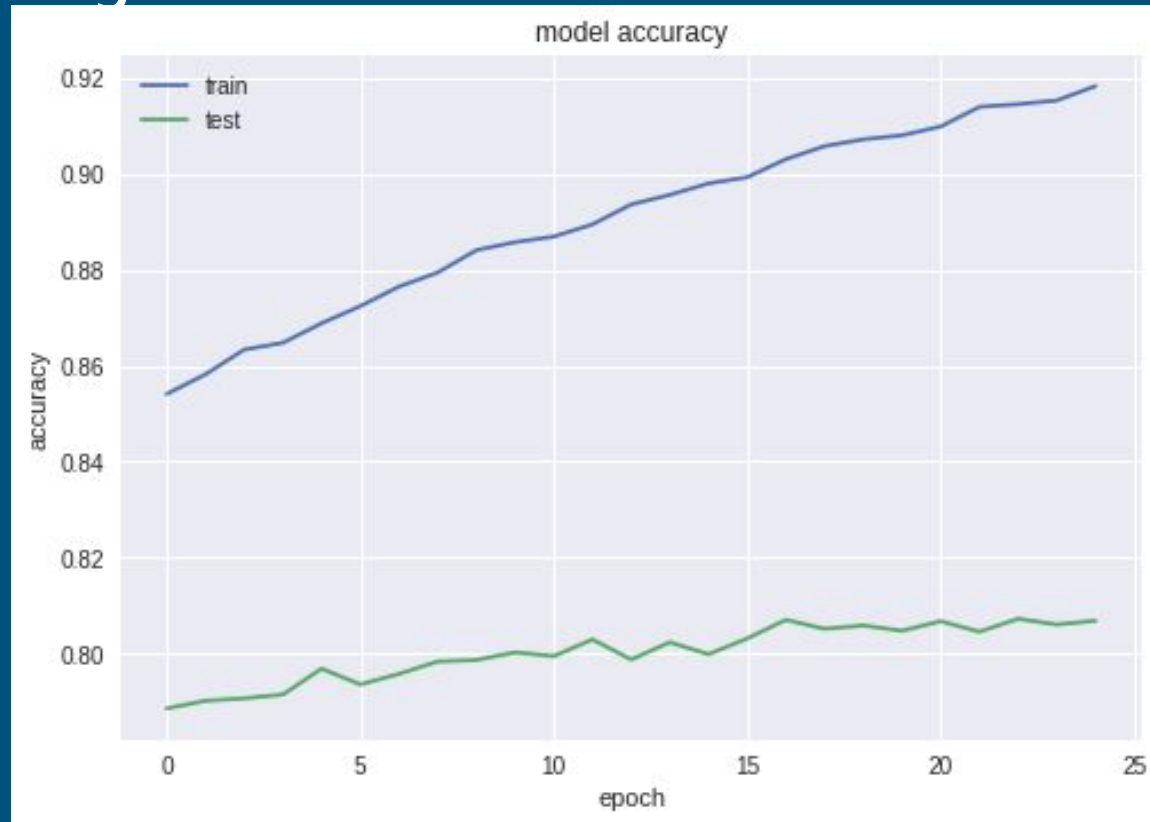
model loss



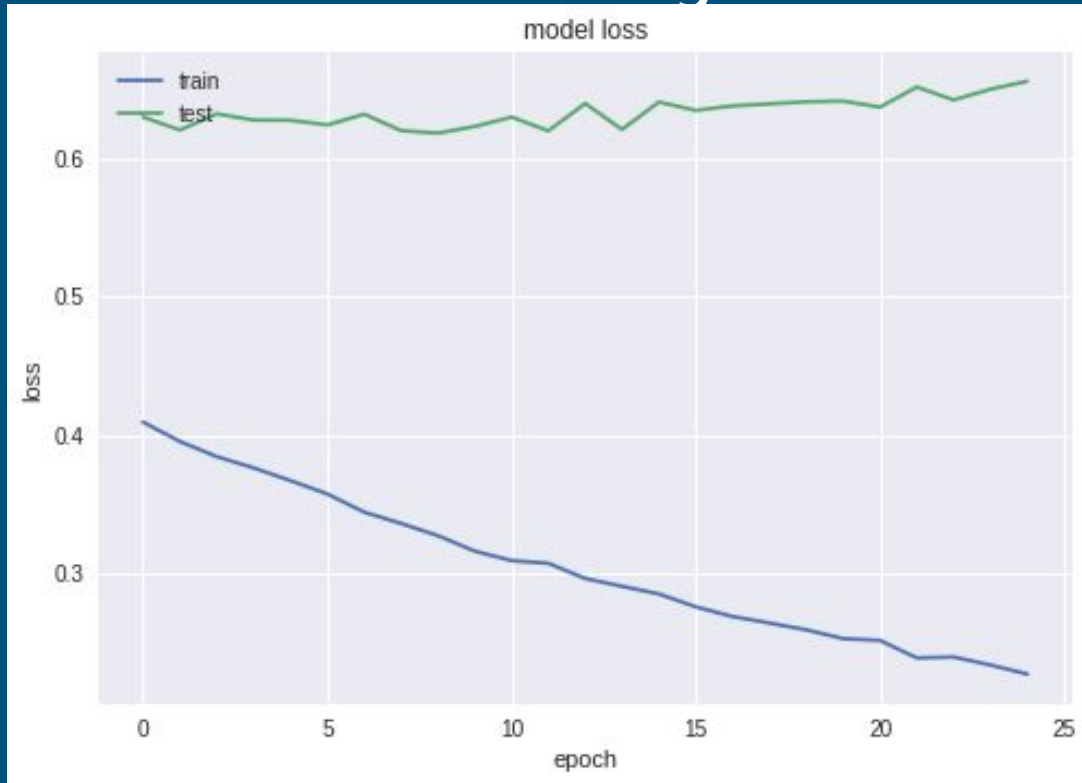
Relu Activation function



Sigmoid Activation function



Model loss for Sigmoid



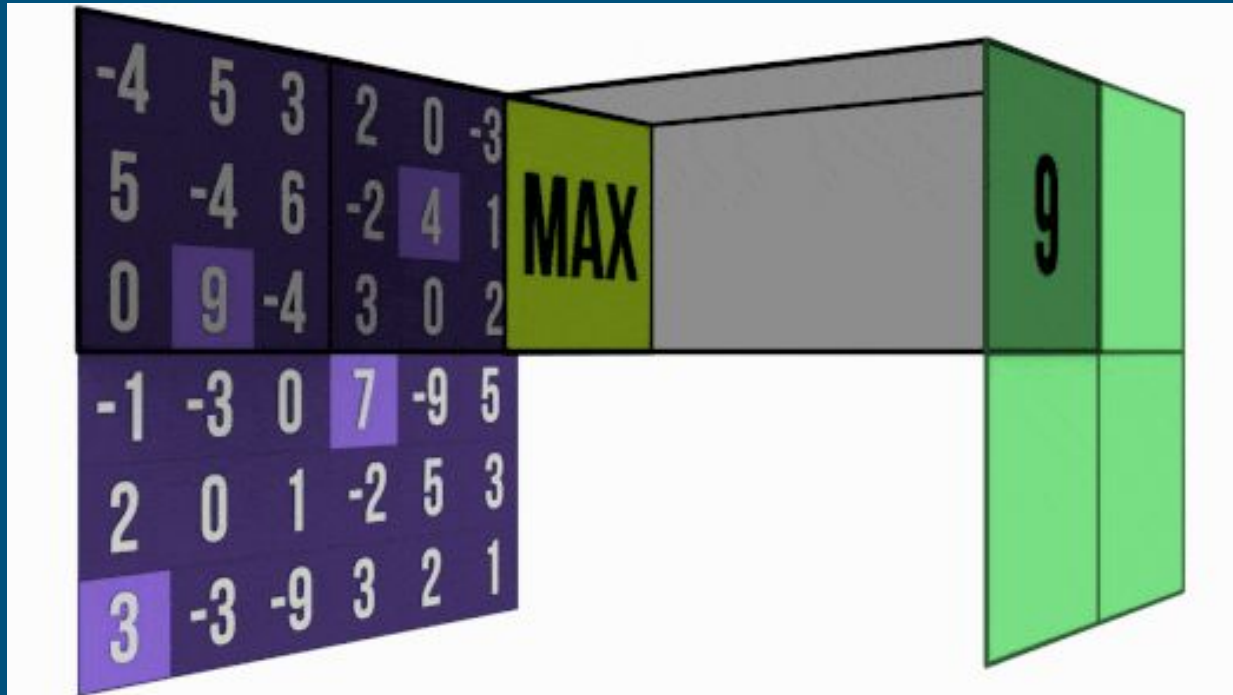
Pooling Layers

MaxPooling2D

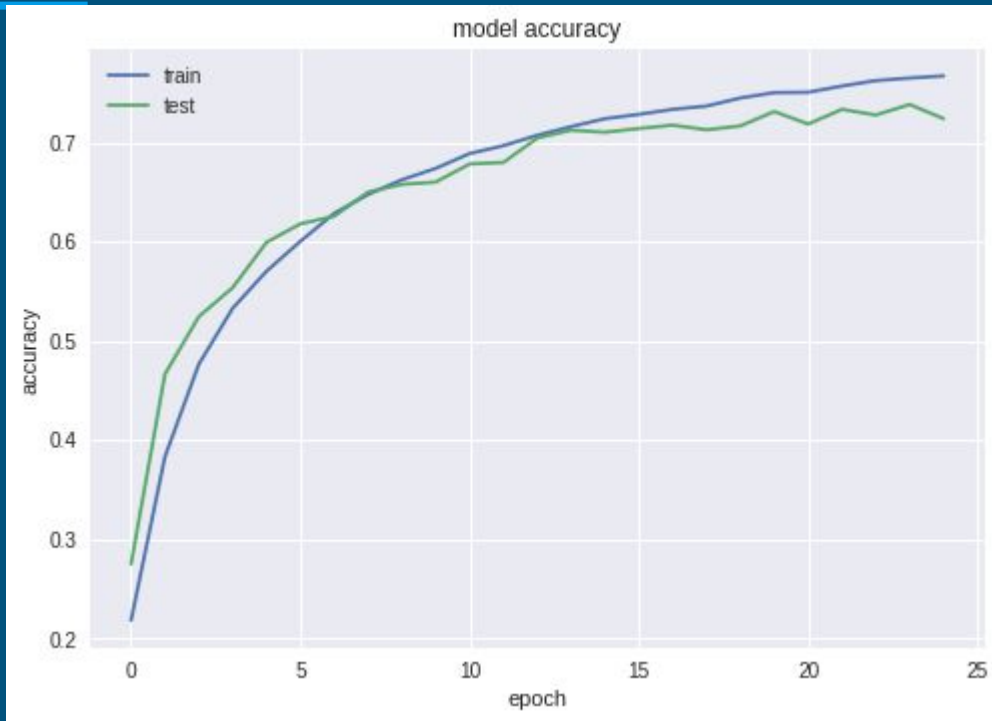
MaxPooling1D

MaxPooling3D

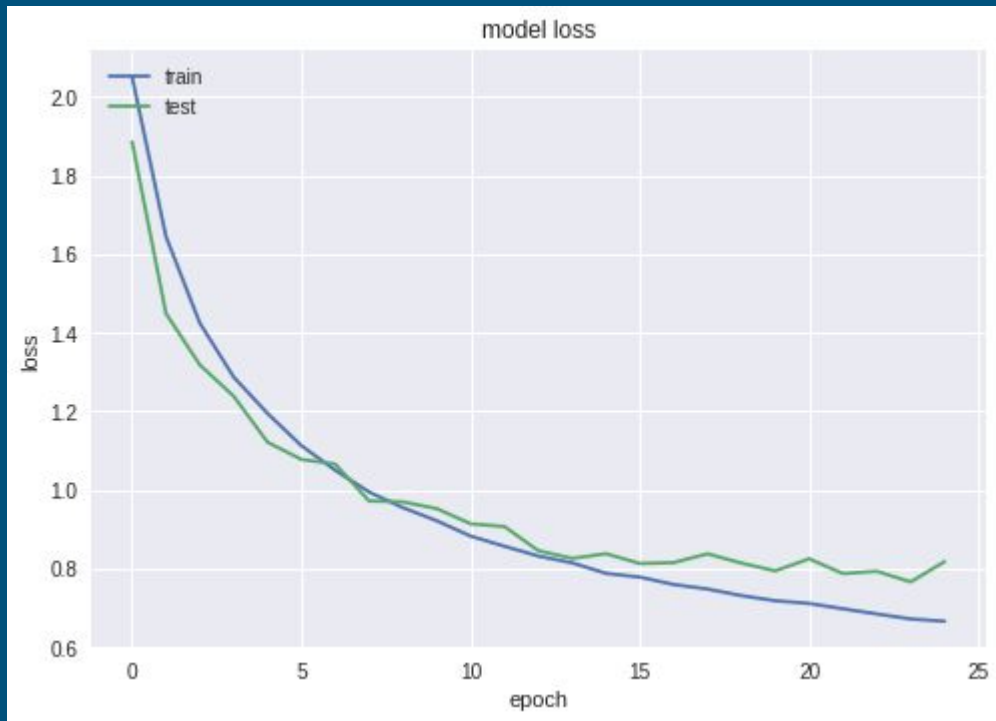
MaxPooling Example



MaxPooling2D (Relu - Hidden Layers)



MaxPooling2D (Relu - Hidden Layers)



Pooling Layers

Pooling layers with (3 *3) input to Pooling layers

