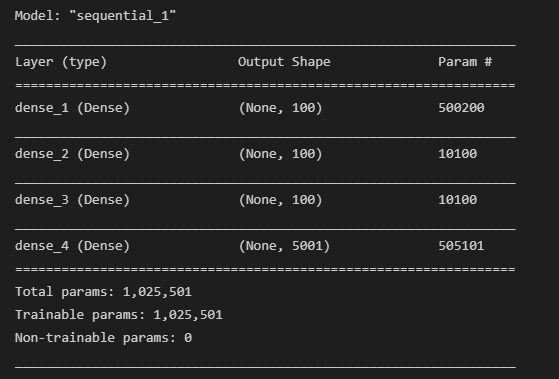
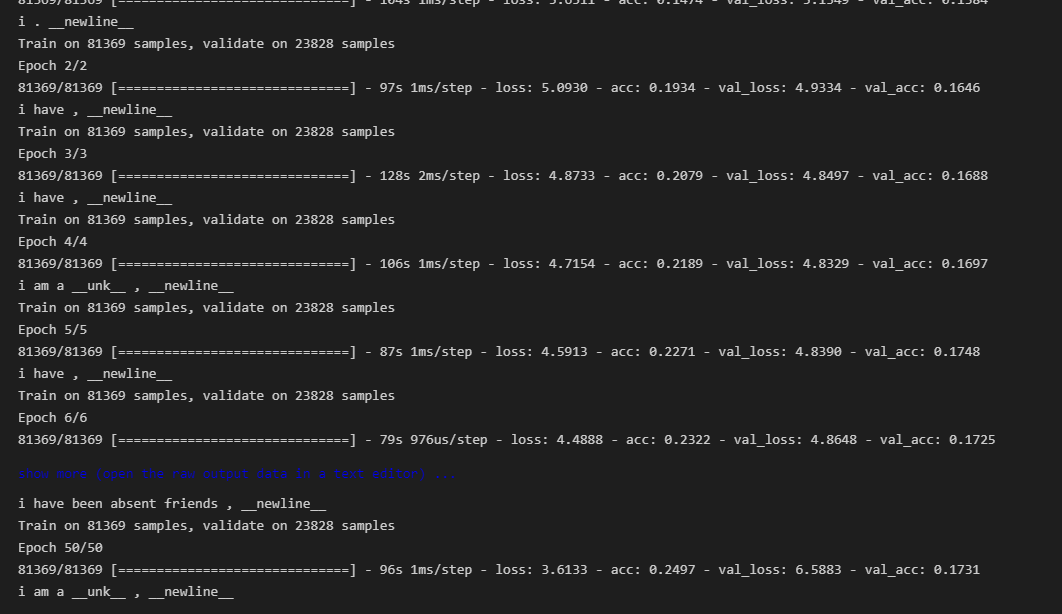
**Lab sheet 11 - Deep Learning**

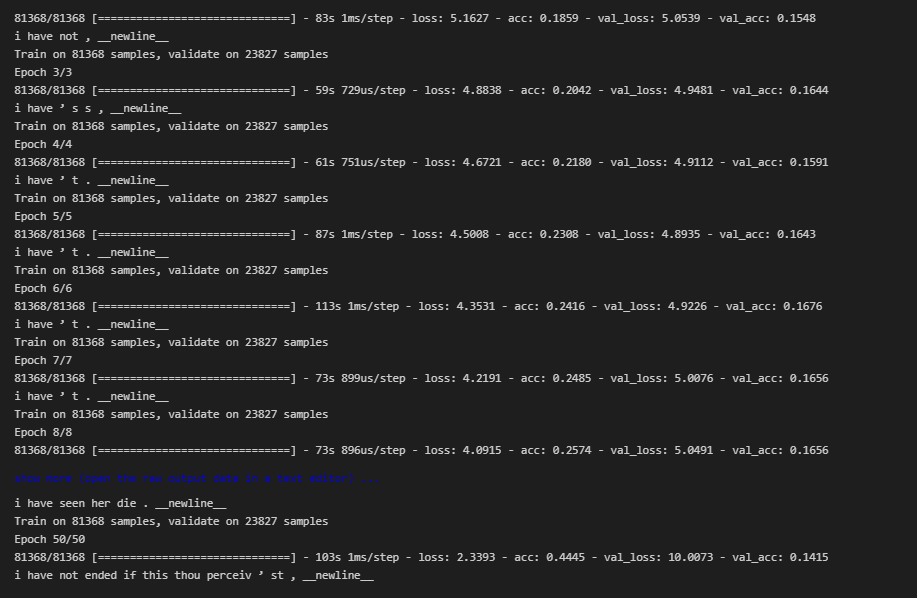
1. **Neural Network Language Model**



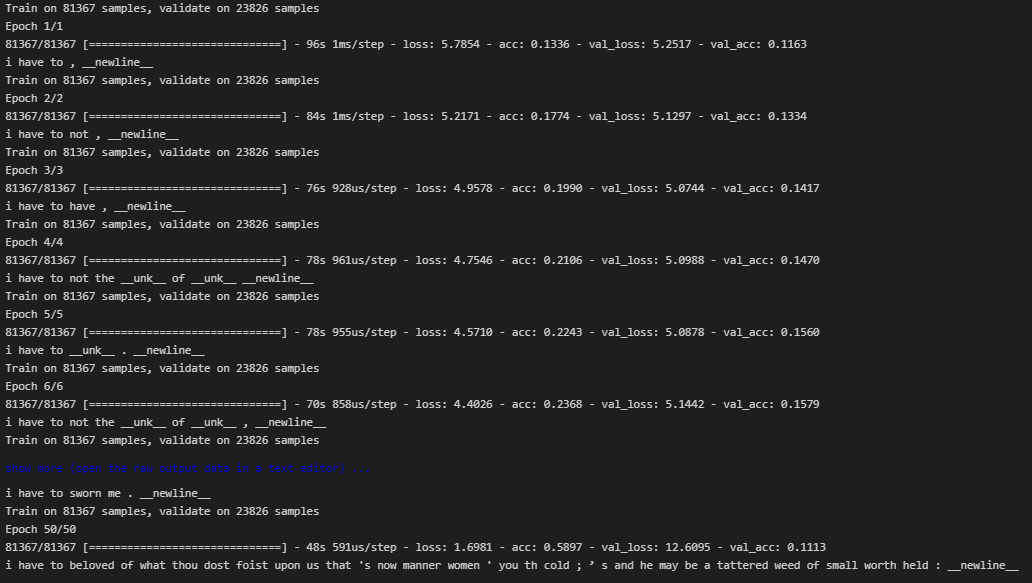
Model fitting

****

**Bigram model**

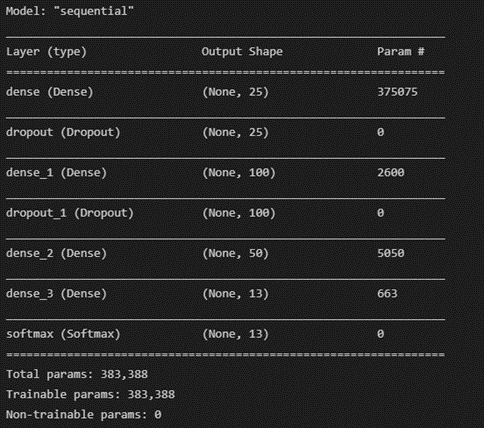
****

**Trigram model**

****

1. **Sentiment Classification using Neural Network**

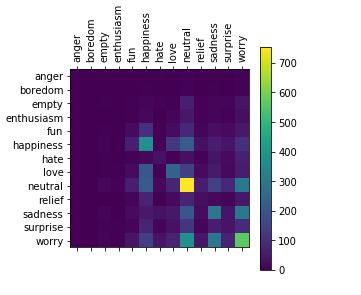
Model architecture



Test accuracy

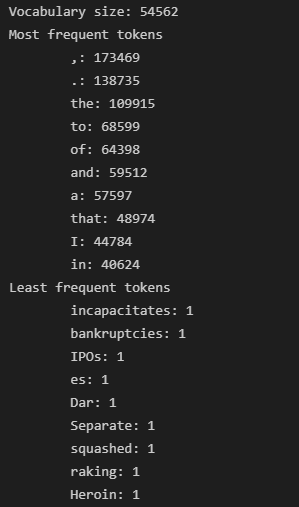


Confusion matrix

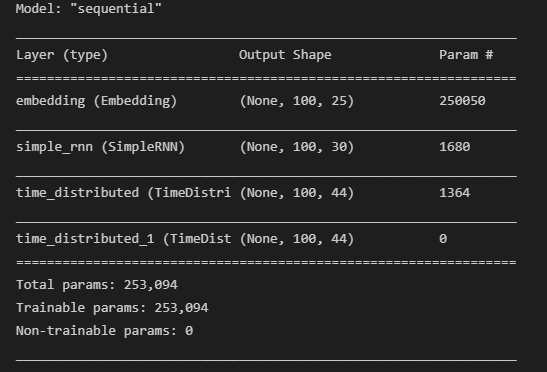
****

1. **Per timestep prediction using Neural Network – POS tagging**

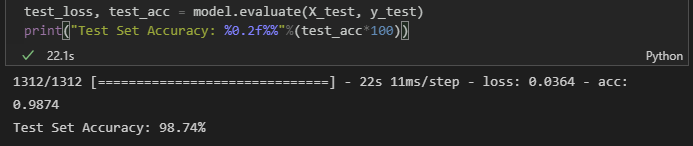
Vocabulary building

****

Model Definition

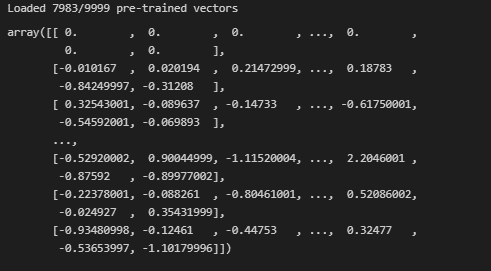
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Test set accuracy

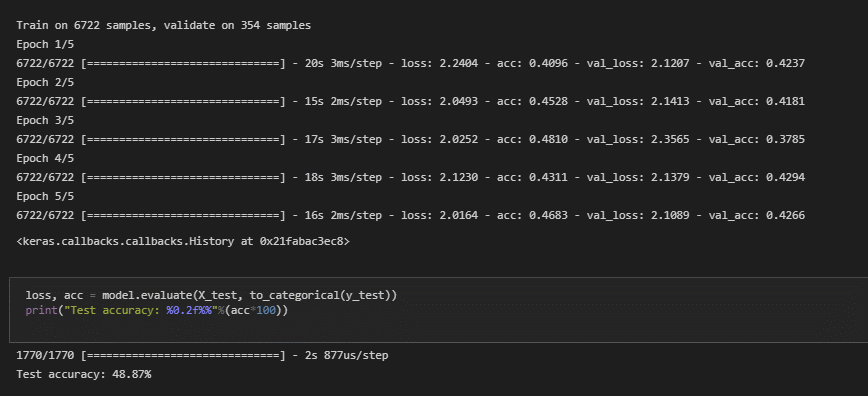
****

1. **Pre trained embedding**

Pre trained vectors

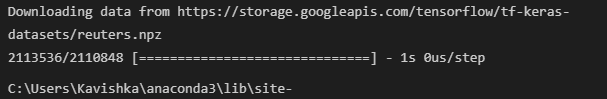


Training and testing accurcy

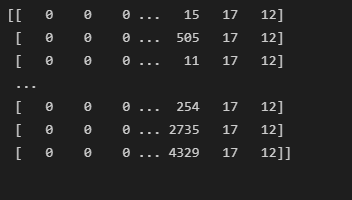


1. **Recurrent Neural Network**

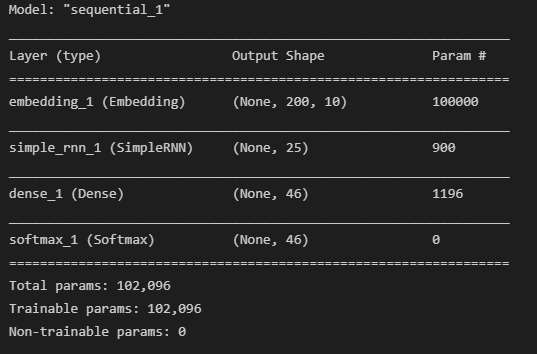
Data Loading



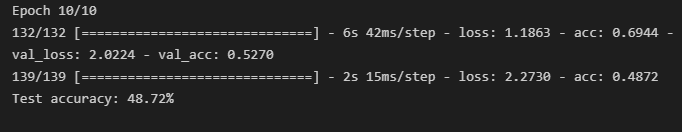
Data preparing

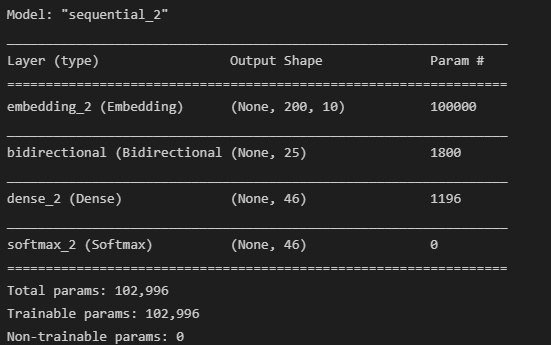
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Simple RNN

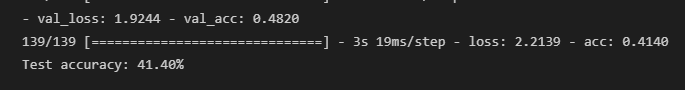
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Result

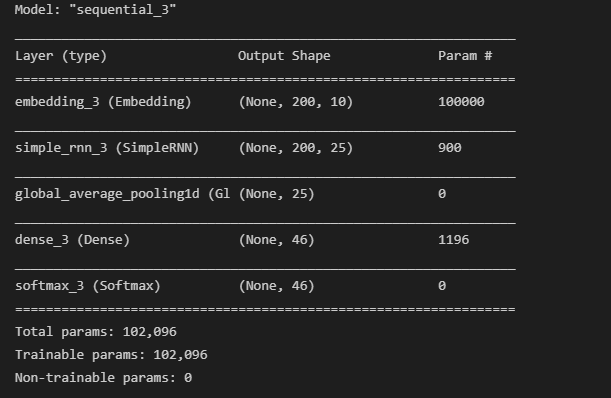


Bidirectional RNN

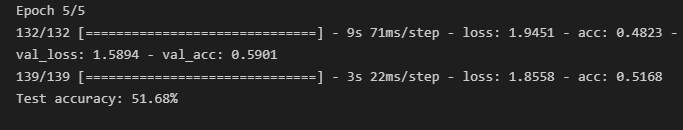
Result



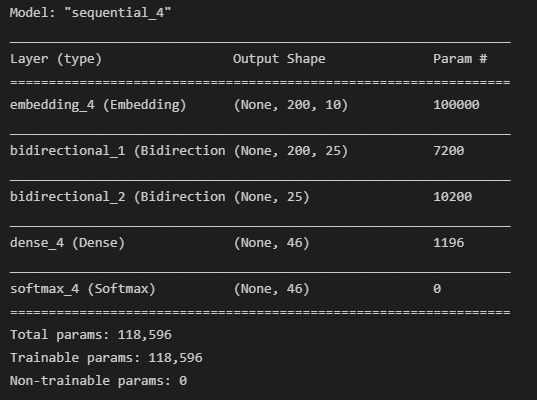
Simple RNN with averaging



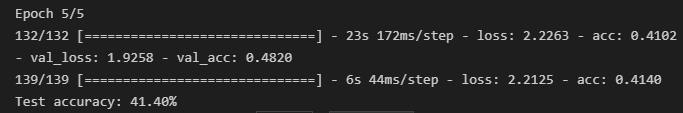
Result



Multilayer Bidirectional RNN

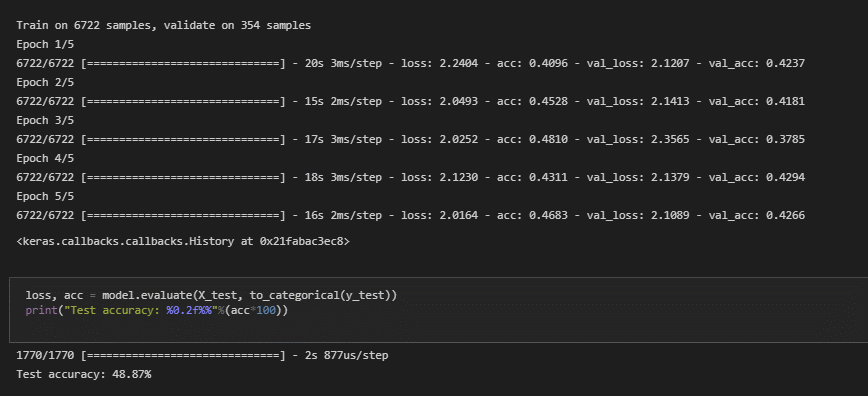
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Result

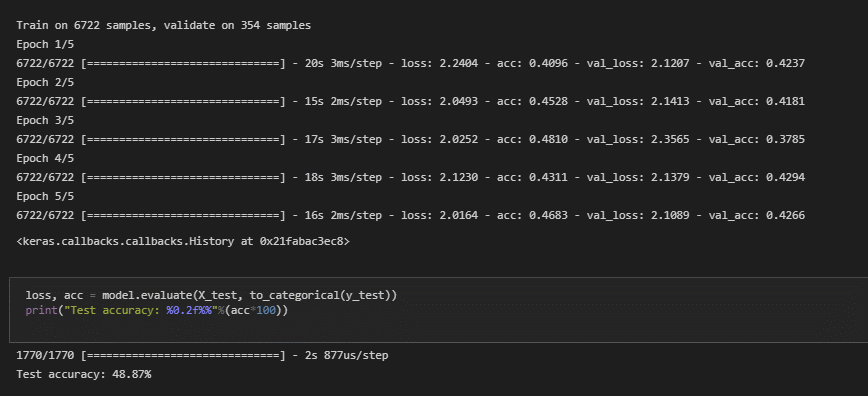
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1. **Reuters News Classification**

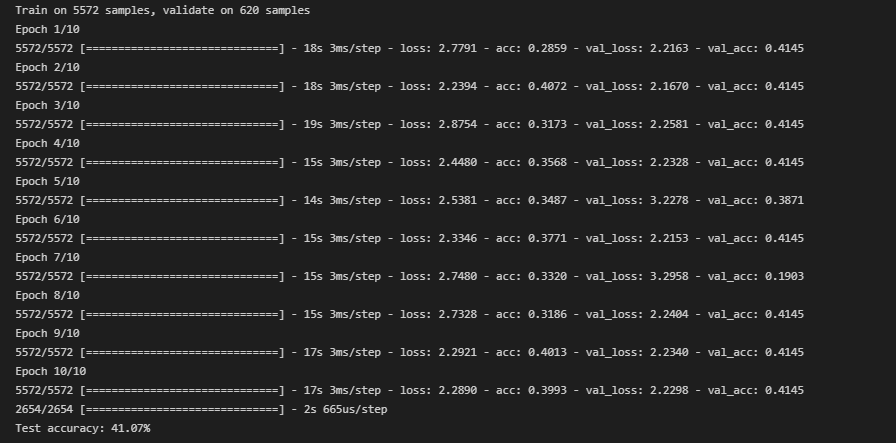
Data loading



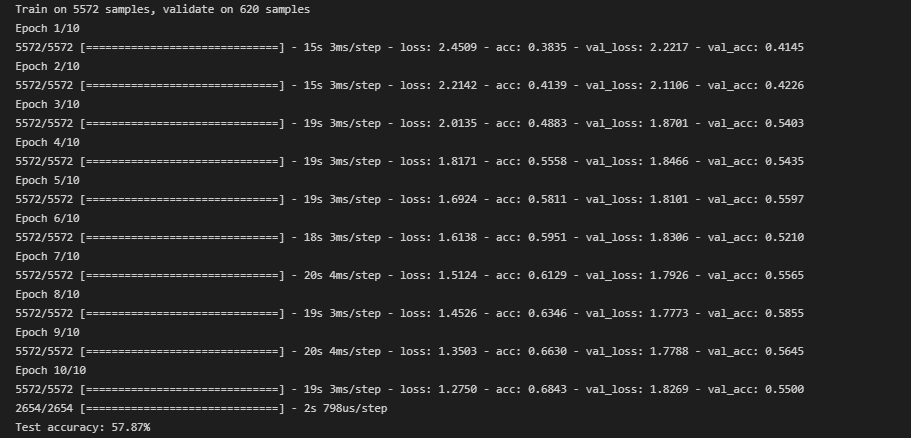
Dense NN model



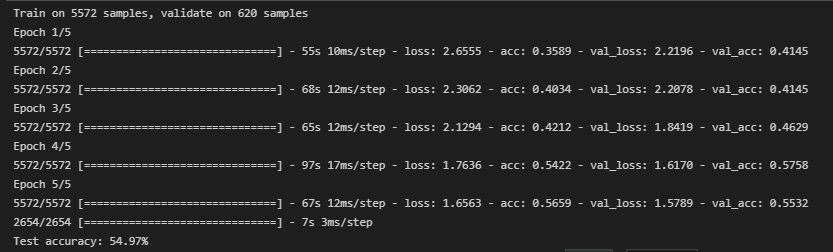
Vanilla RNN



Bidirectional RNN



Multilayer Bidirectional RNN



1. **Text-Generation-with-LSTM**

