**RNN: epoch=10 dimension 8**

32s 2ms/step - loss: 0.0193 - acc: 0.9960 - val\_loss: 0.7470 - val\_acc: 0.8067

27s 2ms/step - loss: 0.3210 - acc: 0.8602 - val\_loss: 0.7281 - val\_acc: 0.6567

42s 3ms/step - loss: 0.5017 - acc: 0.7649 - val\_loss: 0.4396 - val\_acc: 0.8097==with epoch2

**Dimension is 2 from 8**

32s 2ms/step - loss: 0.6946 - acc: 0.5026 - val\_loss: 0.6925 - val\_acc: 0.5053

26s 2ms/step - loss: 0.1790 - acc: 0.9341 - val\_loss: 0.4355 - val\_acc: 0.8388

33s 2ms/step - loss: 0.6754 - acc: 0.5825 - val\_loss: 0.6687 - val\_acc: 0.5795==with epoch 2

**From RNN to LSTM**

131s 9ms/step - loss: 0.4937 - acc: 0.7501 - val\_loss: 0.3601 - val\_acc: 0.8492

34s 2ms/step - loss: 0.0425 - acc: 0.9864 - val\_loss: 0.7991 - val\_acc: 0.7962

40s 3ms/step - loss: 0.3851 - acc: 0.8376 - val\_loss: 0.3879 - val\_acc: 0.8390==withepoch 2

**Add more layer with dropout and check how your model accuracy changes**

131s 9ms/step - loss: 0.5383 - acc: 0.7080 - val\_loss: 0.3774 - val\_acc: 0.8448

25s 2ms/step - loss: 0.4094 - acc: 0.7249 - val\_loss: 0.4479 - val\_acc: 0.7927 dropout=0.5

25s 2ms/step - loss: 0.2950 - acc: 0.8725 - val\_loss: 0.5249 - val\_acc: 0.7632 with dropout=1

25s 2ms/step - loss: 0.6175 - acc: 0.6159 - val\_loss: 0.4844 - val\_acc: 0.7915==withepoch 2

embedding\_1 (Embedding) (None, 552, 8) 80000

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simple\_rnn\_1 (SimpleRNN) (None, 32) 1312

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dense\_1 (Dense) (None, 1) 33

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activation\_1 (Activation) (None, 1) 0

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Total params: 81,345

Trainable params: 81,345

Non-trainable params: 0

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Train on 14000 samples, validate on 6000 samples