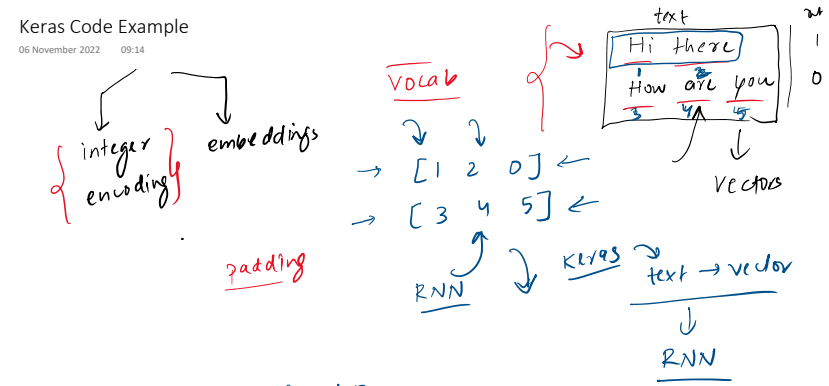
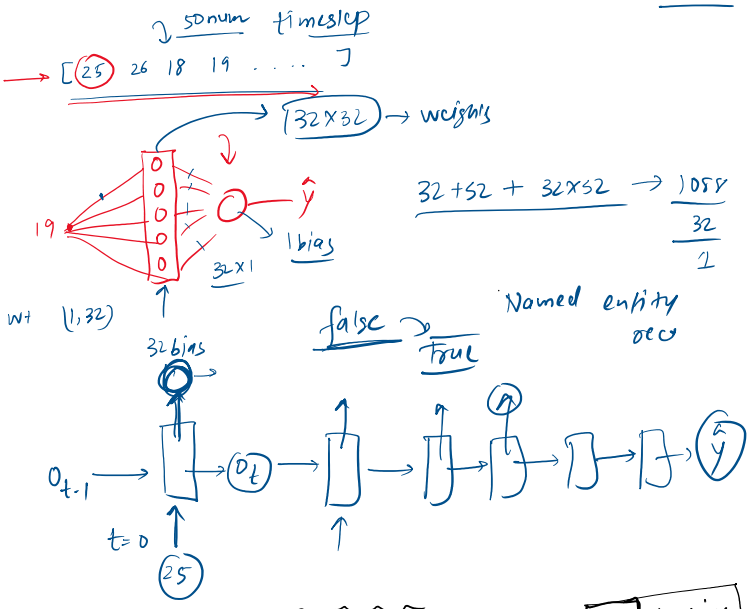
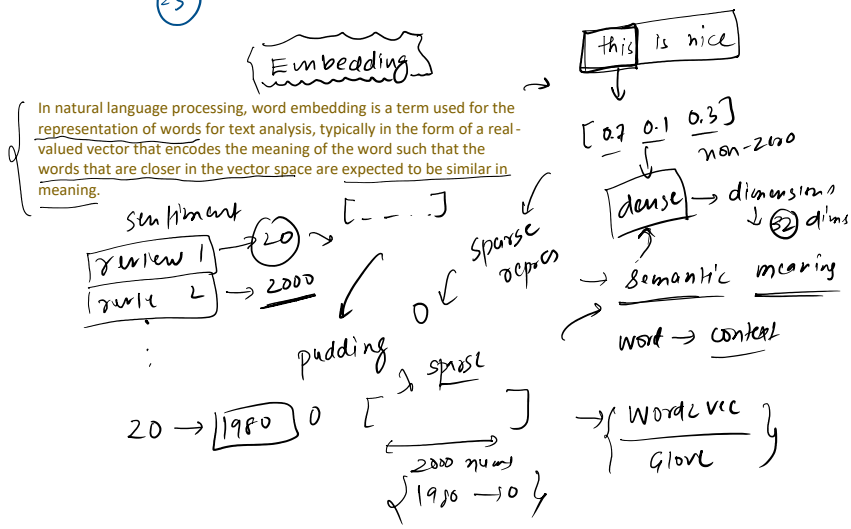
Keras Code Example

06 November 2022 09:14



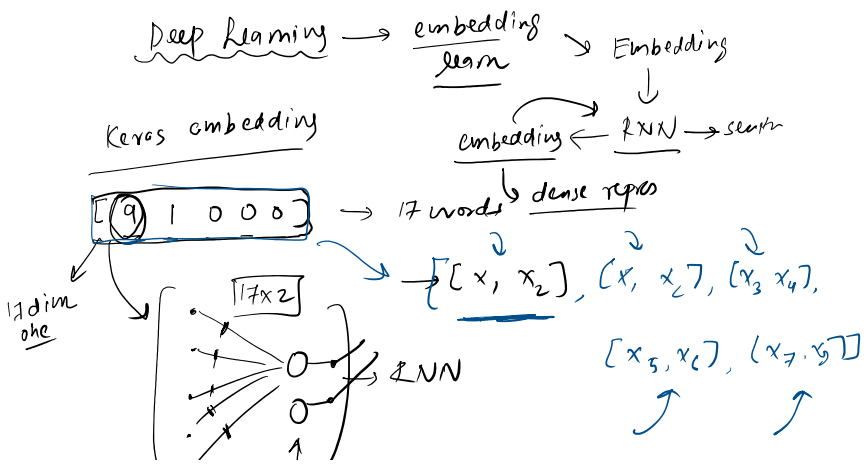


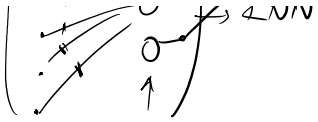
Inside embedding layer is a lookup table , with no ann but traininable paramaters like
Table size is : Vocab size * output dim



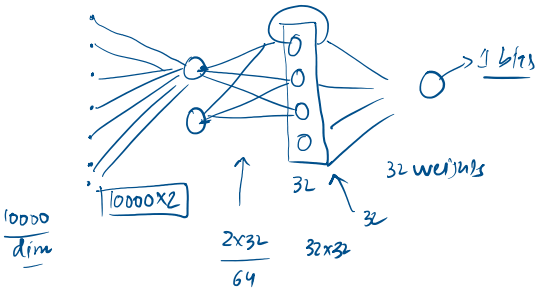
Let say vocab size is 1000 , then a word is represented as [0,1,,,,,,,,,,..0] (sparse), but in embedding it is like [0,7 0.1 0.3] (dense).

Slly for seq length like when padded then so many 0's , lead to sparse , check review wala example.
Also these non-zero values , denote some sematic meanings.
For example : (if 3 values , then one may denote grammar , punctuation etc , just as a example)





17 nodes



Step : 1. Input X => (2,3) => batch_size=2, seq_len=3
Step 2 : Weight Matrix => (8,4) => embedding_dim=4
Step 3 : Output => (2,3,4) => embeddings for each token

Actually its like loopup which access index ,
there is no such one hot encoding happens inside.