LAB 7 - TRANSFORMING SEQUENCES

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1. SEQUENCE-TO-SEQUENCE MODELLING

1.1. Complete and train a sequence-to-sequence model

The completed code snippet is given below:

```
def forward(self, src):
        embedded = self.embedding(src)
        output, (hidden, cell) =
                self.rnn(embedded)
        return hidden, cell
```

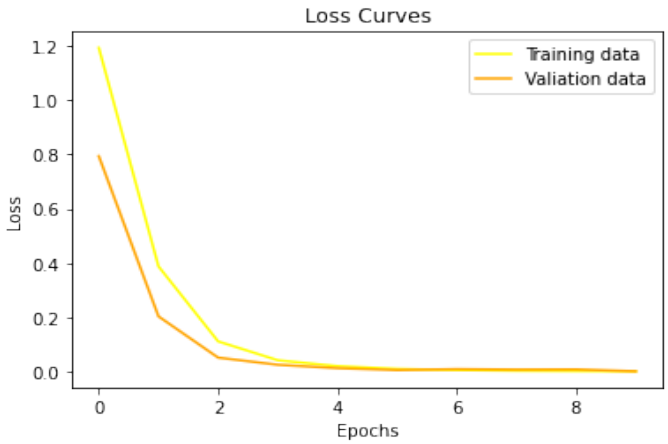

Fig. 1. Loss Curve

1.2. now use it!

The snapshot of the decoded sequence is given below:

```
Decoded Sequence 1: answer the following
Decoded Sequence 2: why is the order of be output reversed
Decoded Sequence 3: what is the point of tucher forcing
```

Fig. 2. Decoded Sentences

1.3. Sequence Length

If the model is given longer sequences, the word that we get might not be available in the target vocabulary list and it will give a output that will be gibberish.

When we feed the model with extra large chunks of sequence, it is observed that the first and last word are not printed. The model does not provide output for large chunks of sequence. Hence, the model fails in this test case.

The training sequence length is 6. This might be the reason that it cannot take in large dataset. If we increase the size of the training sequence length then it might decode larger chunks of sequence.