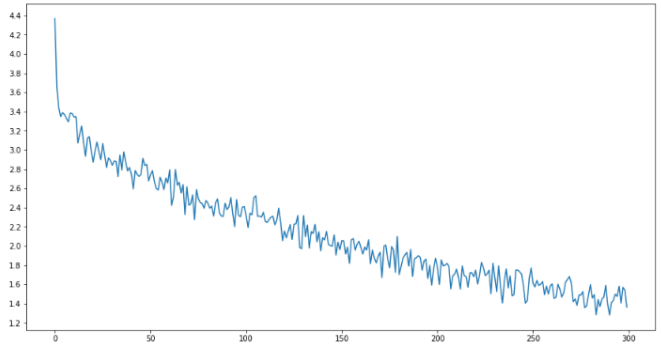
PyTorch Portuguese to English Translator Using a Recurrent Neural Network (RNN) Developed Using Google Colab with GPU Processing Enabled

```
iteration - 1000 loss - 34.9582
iteration - 2000 loss - 31.4401
iteration - 3000 loss - 29.4732
iteration - 4000 loss - 28.5250
iteration - 5000 loss - 27.6231
iteration - 6000 loss - 26.7129
iteration - 7000 loss - 25.9590
iteration - 8000 loss - 24.5095
iteration - 9000 loss - 23.9135
iteration - 10000 loss - 23.7462
iteration - 11000 loss - 23.4664
iteration - 12000 loss - 22.5762
iteration - 13000 loss - 21.4126
iteration - 14000 loss - 21.2490
iteration - 15000 loss - 20.3361
iteration - 16000 loss - 19.9954
iteration - 17000 loss - 19.2680
iteration - 18000 loss - 19.0308
iteration - 19000 loss - 18.3838
iteration - 20000 loss - 17.9226
iteration - 21000 loss - 17.3837
iteration - 22000 loss - 16.8307
iteration - 23000 loss - 17.1208
iteration - 24000 loss - 16.0937
iteration - 25000 loss - 16.2776
iteration - 26000 loss - 15.8003
iteration - 27000 loss - 15.6110
iteration - 28000 loss - 14.5848
iteration - 29000 loss - 14.5444
iteration - 30000 loss - 14.5563
[<matplotlib.lines.Line2D at 0x7f5b3d9c35c0>]
```



You can see the loss steadily declining after each iteration

```
> ela a sempre gentil com todos .
= she is always kind to everyone .
< she is always kind to her her . <EOS>

> eu sou professora de ingla s .
= i am an english teacher .
< i m a teacher teacher . <EOS>

> na s estamos falando sobre voca .
= we re talking about you .
< we re talking about you . <EOS>

> eu estou dando o meu melhor .
= i m trying to do my best .
< i m trying to have my best . <EOS>

> estou em paris .
= i am in paris .
< i am in a . <EOS>

> voca na o a bem vinda .
= you re not welcome .
< you re not like that . <EOS>
```

The first sentence is in Portuguese, the second sentence is the correct English translation, and the third sentence is the predicted translation

Attributions:

Language data is located here.

Original code for French translator is located here.