

Results

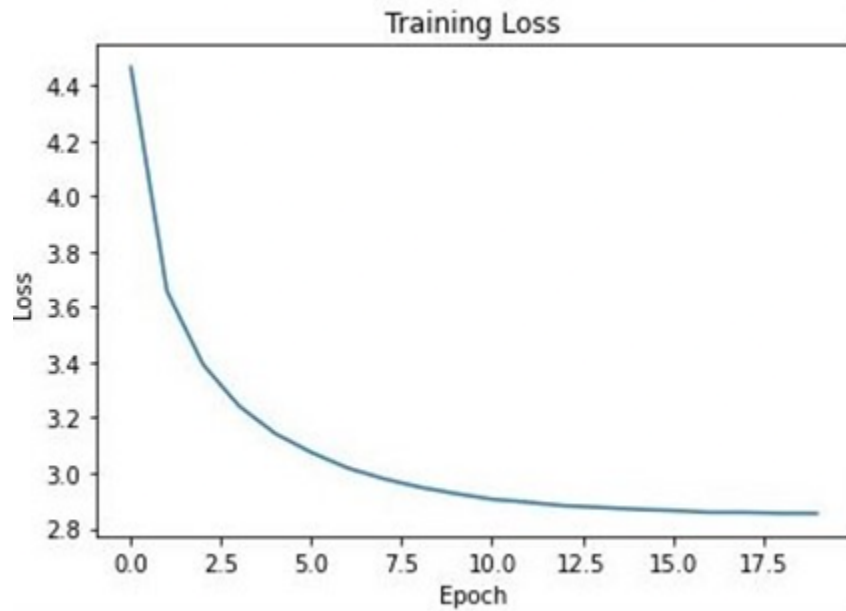


Fig1. Loss Graph of the GRU model for 20 epochs

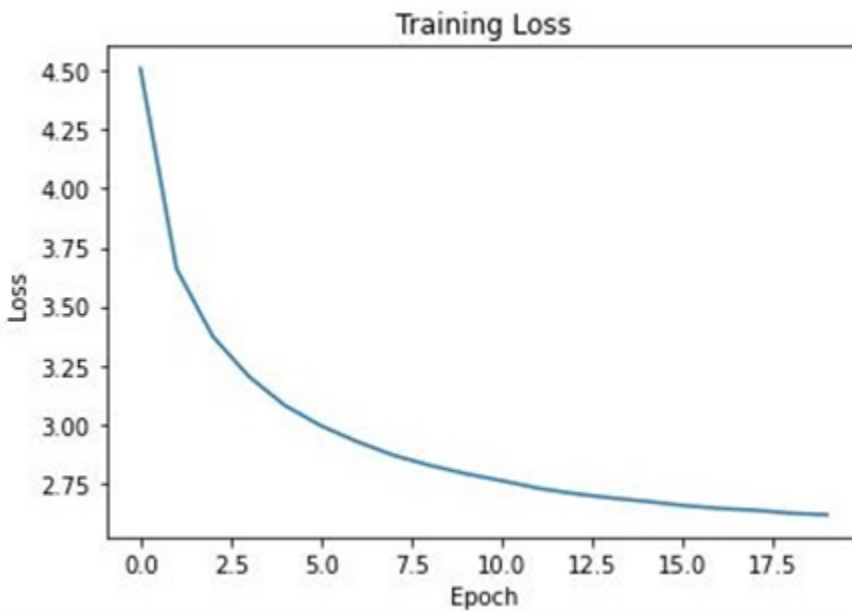


Fig2. Loss Graph of the LSTM model for 20 epochs

```
Actual
start hiker standing high on bluff overlooking the mountains below end
start person on ski looks from hill over snow covered landscape end
start skier is overlooking snowcovered mountain end
start skier is overlooking the beautiful white snow covered landscape end
start skier pauses on mountaintop end
-----
```

```
predicted: start man is standing on mountaintop end
```



Bleu1-score: 0.6

Bleu-1 Score for the image in Result1 from GRU model

```
print("Bleu1-score:",bleu_score)
```

```
Actual
start boy plays in pool with an inflatable toy end
start boy swimming in pool end
start child on pink raft in pool end
start small boy swims with pink floatation device in swimming pool end
start boy playing on pink raft in pool end
-----
```

```
predicted: start boy swimming underwater end
```



Bleu1-score: 0.47768754038252614

Bleu-1 Score for the image in Result2 from GRU model

Actual
start hiker standing high on bluff overlooking the mountains below end
start person on ski looks from hill over snow covered landscape end
start skier is overlooking snowcovered mountain end
start skier is overlooking the beautiful white snow covered landscape end
start skier pauses on mountaintop end

predicted: start man is standing on mountaintop end



Bleu-score2: 0.3872983346207417

Bleu-2 Score for the image in Result3 from GRU model



Actual
start brown dog is running in grassy plain end
start brown dog runs along path in the grass end
start dog running in field end
start dog running on narrow dirt path end
start the dog is running along path that has been made through the uncut grass end

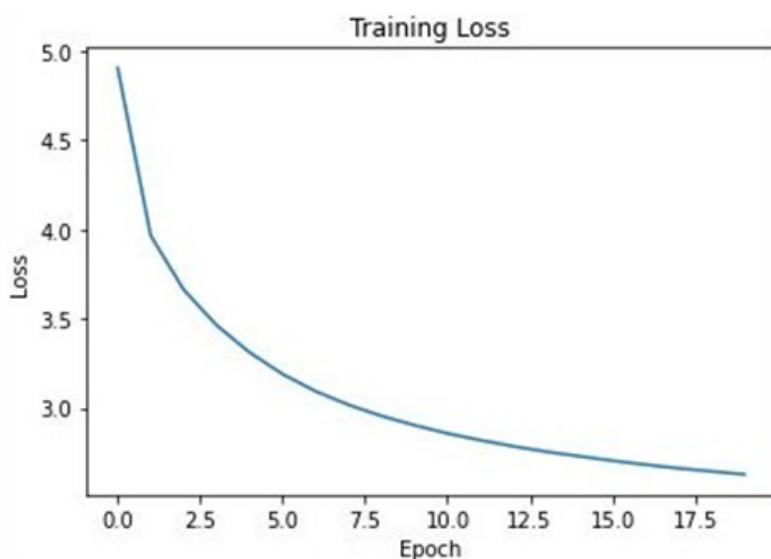
predicted: start brown dog is running through the grass end



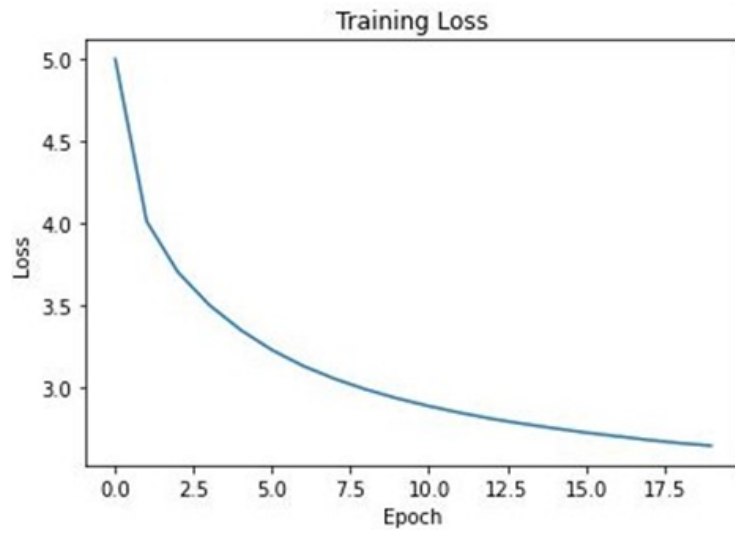
Bleu2-score: 0.9128709291752769

Bleu2 score for the image for LSTM model

Photo	Caption Generated
	<pre> To enable them in other operations, rebuild TensorFlow 1/1 [=====] - 1s 742ms/step start man in wetsuit is surfing on the beach end C:\Users\prath\nlp> </pre>
	<pre> To enable them in other operations, rebuild TensorFlow 1/1 [=====] - 1s 945ms/step start rugby players are playing football end C:\Users\prath\nlp> </pre>



Loss Graph for GRU for Flickr30k dataset



Loss Graph for LSTM for Flickr30k dataset



Result1 using GRU



Result1 using LSTM