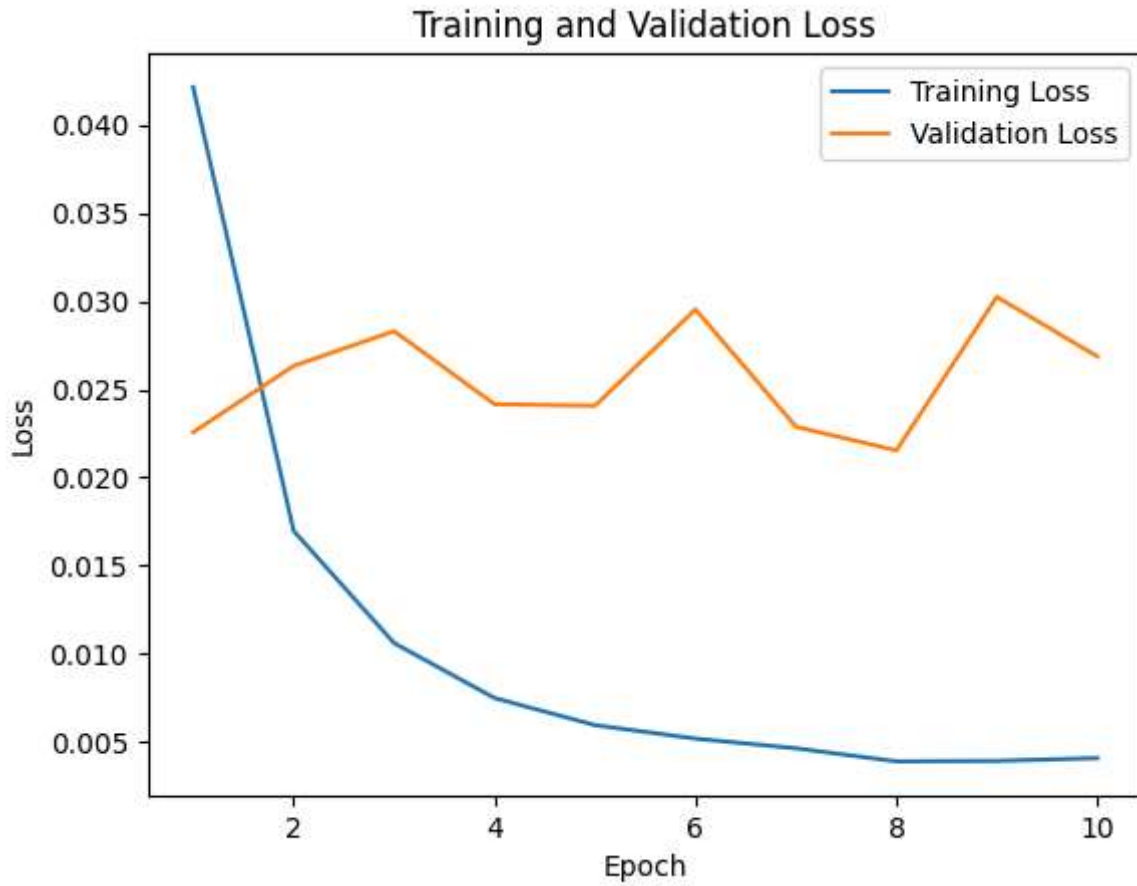


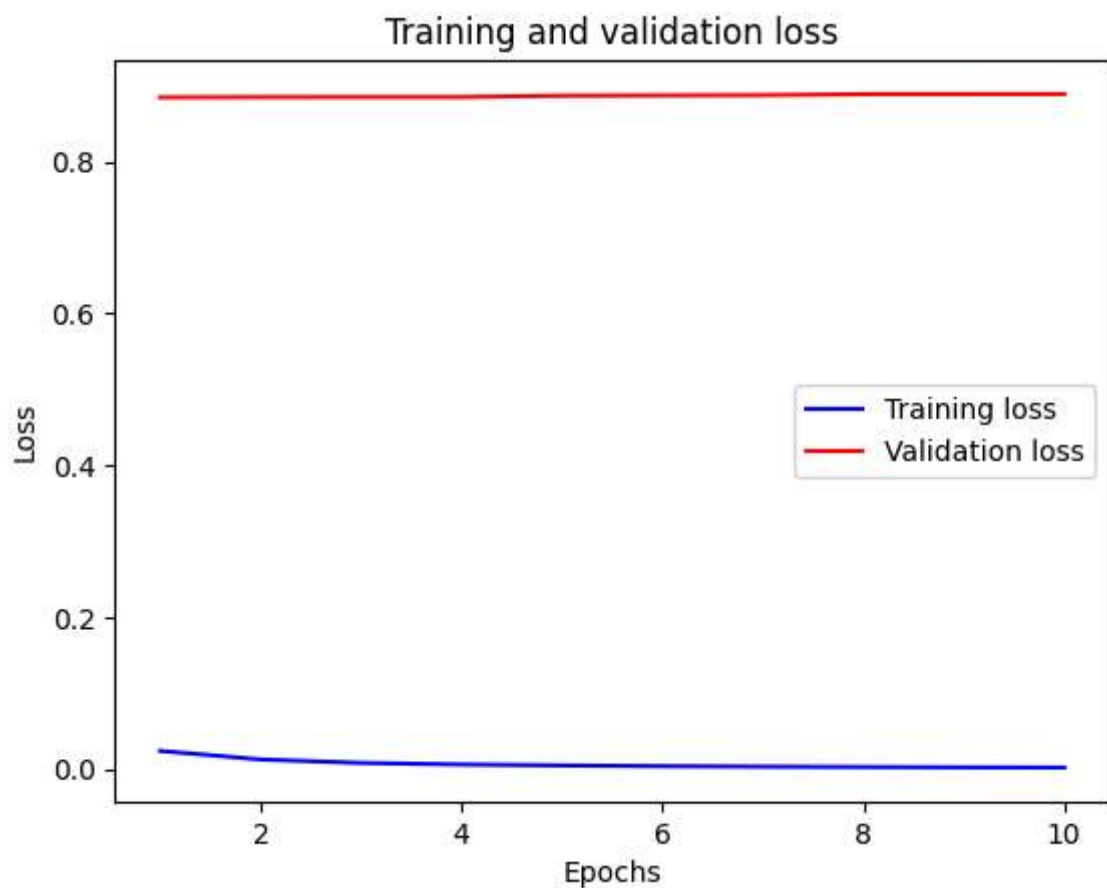
## TASK-1

### Part A:



The model is getting trained, and the loss is decreasing. However, the Validation loss is higher than the training loss implying overfitting of the model. With unstable decent

### Part C:



The model converges after 2 epochs. However, the gap between training loss and validation loss implies a need for more generalisation ability overfitting.

Model No	Validation
Part A	0.8744052823617103
Part B	0.8603265863680176
Part C	0.8875366343583356

Model C, being a fine-tuned version of Sentence Bert, outperforms others due to its inherent prior knowledge. Conversely, Model B, starting from zero-shot, experiences a slight decrease in performance. Model A, utilizing BERT embeddings during training, excels in addressing the problem statement compared to Model B.