COMP-5014

Assignment 4

A) pack_padded_sequence is used after the embedding and before the putting on the RNN. It packs the padded embedded sequences. We also provide lengths of original sentences for pytorch to know how to pack and unpack.

Packed Sequence does not create a Tensor that fits the maximum length of the sequence by adding padding tokens. It operates on the original length data without adding the padding. Which will reduce the lot of computation power as compare to pad_sequence. It also sorts the function ascending or descending of their lengths. And pad_packed_sequence is the inverse process of pack_padded_sequence. It pads a packed batch of variable length sequences.

B) sort_tensors() function sort all tensor input in descending order and keep original tensor index to reform the original inputs after the computation.
sorted inputs are take less time and less computation power in functions such as embedding, pack_padded_sequence. But before the computing the loss inputs should be in its original format. And resort_tensor function do the same.