Part 3 tagger2

If a word in the training data is not found exactly in the pre trained:

1. If the lower case version is found in the pretrained we will copy the embedding and use it only for this word in original form.
2. If the lower cases version is not found in pretrained in no capitalization, we will create vectors with glorot

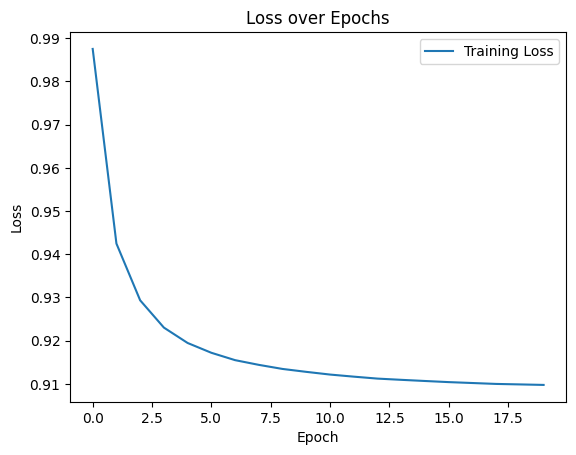
We are finetuning the word vectors

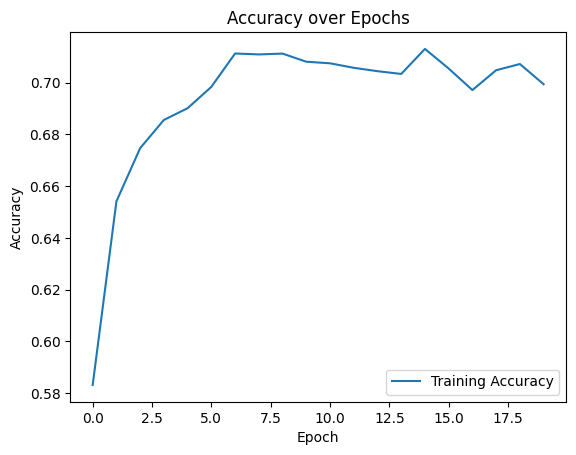
There is a risk with using in test vectors that are only pre trained and not fine tuned. Need to think this through.

NER

Hidden dim 20

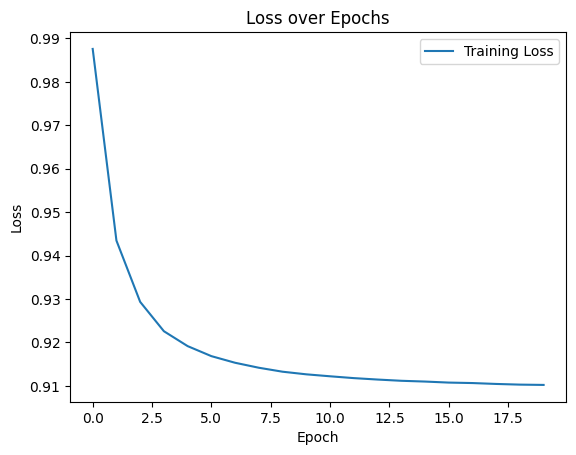
Accuracy peaked in epoch 6 with 0.7113201055166877

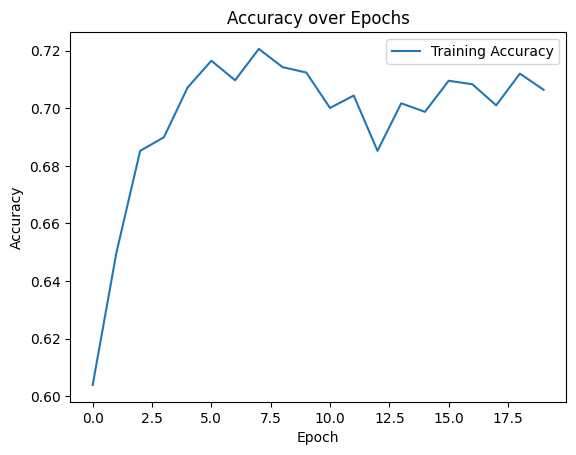




Hidden dim 40

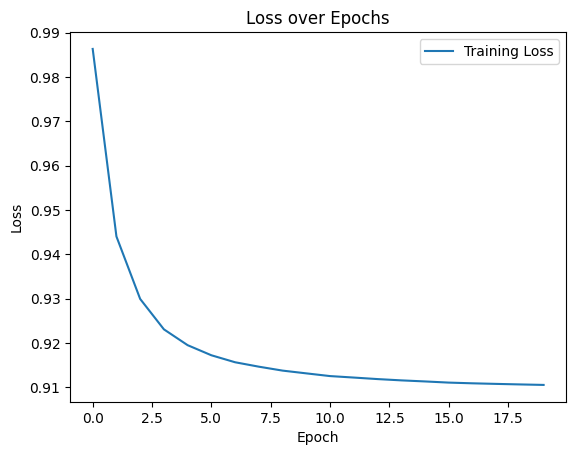
Peak in epoch 7 Accuracy: 0.7206000229016375

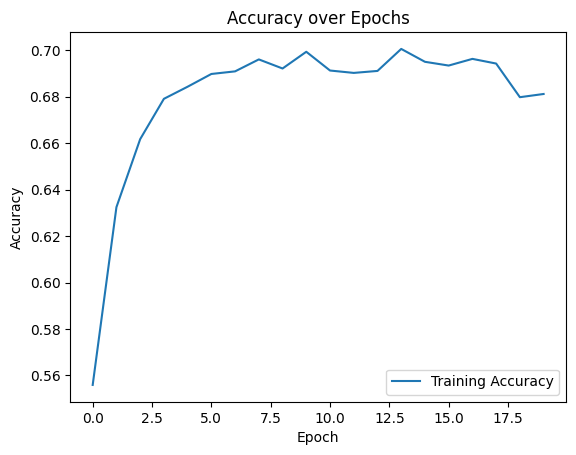




Hidden dim 60

Peak in epoch 9 with Accuracy: 0.6993471538197228





Part 4

Tagger 3

For words that are Smaller then 3, this means they don’t have prefix and suffix of 3.

So for each word of under length 2 we will create a suffix and prefix (identical)

Also for the padding words there is need for some vector.

For usage of pretrained vectors,

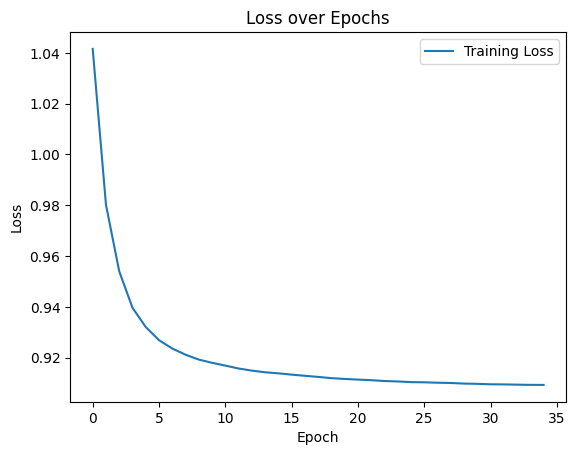
There is problem with words that are found in the pretrained vecs vocabulary but are not found in dev set, so we don’t have a suffix/prefix vectors for them. So we need to use the pretrained vec for them, but use the UNK word for their prefix/suffix.

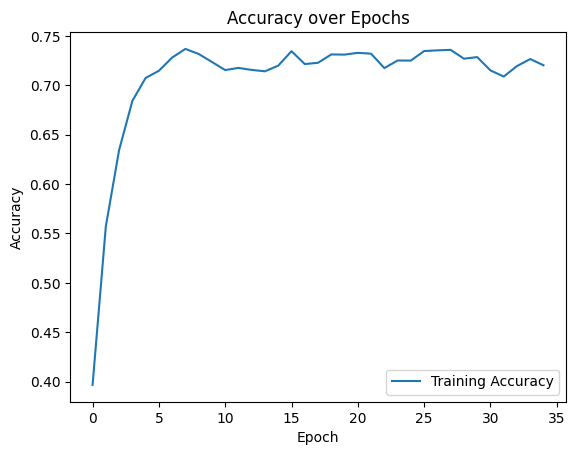
NER

Tagger 3 without pre trained vectors

Hidden dim 20

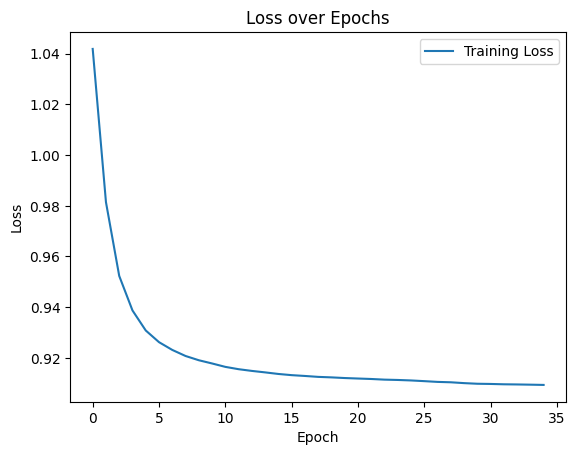
Peak in epoch 27 Accuracy: 0.7358390119250426

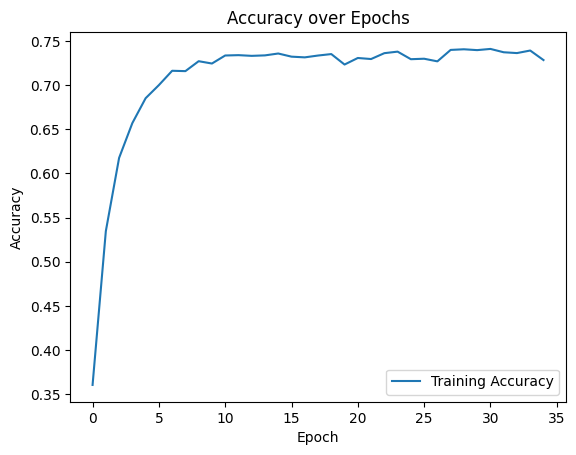




Hidden dim 40

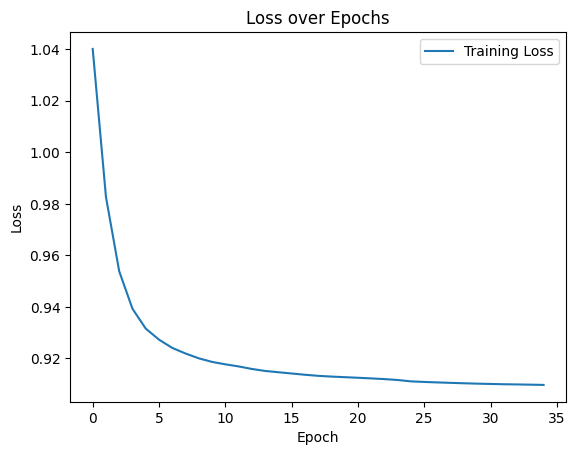
Peak in epoch 30 Accuracy: 0.7409065472859541

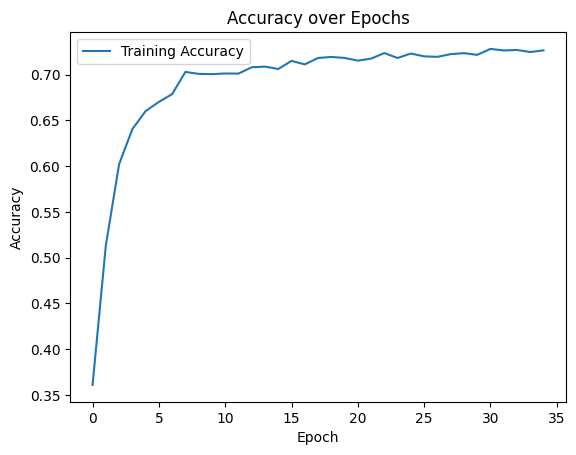




Hidden dim 60

Peak in epoch 30 Accuracy: 0.7281620439636322



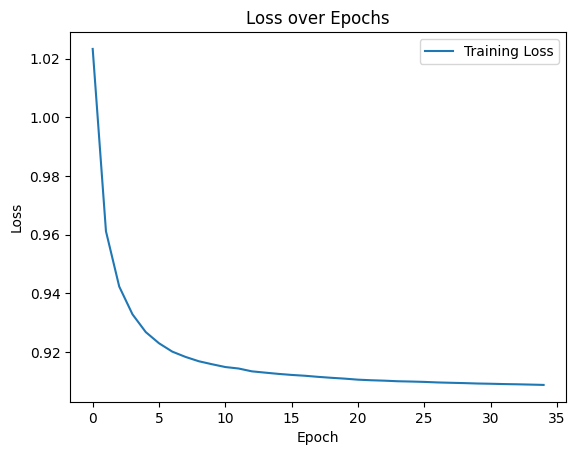


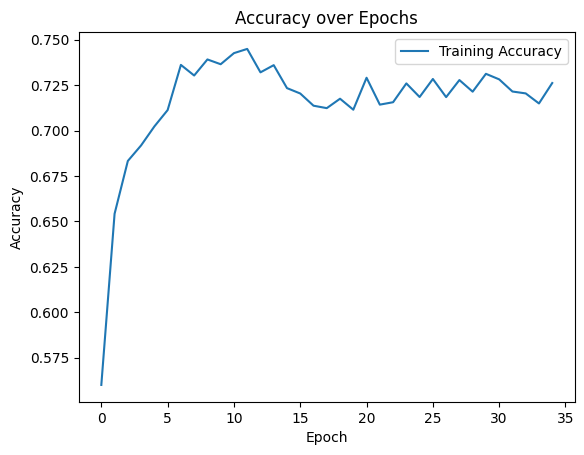
NER

Tagger 3 with pre trained vectors

Hidden dim 20

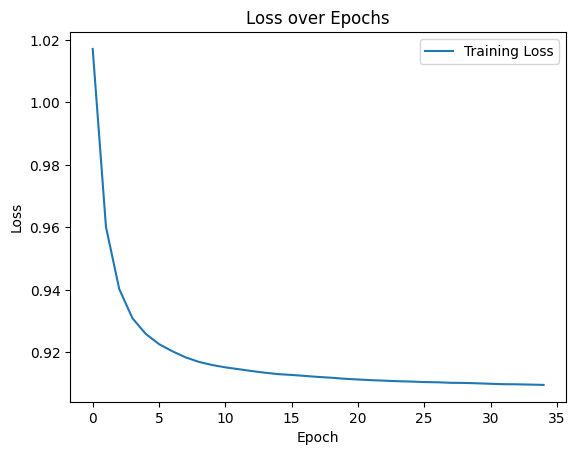
Peak in epoch 11 with Accuracy: 0.7448766206608114

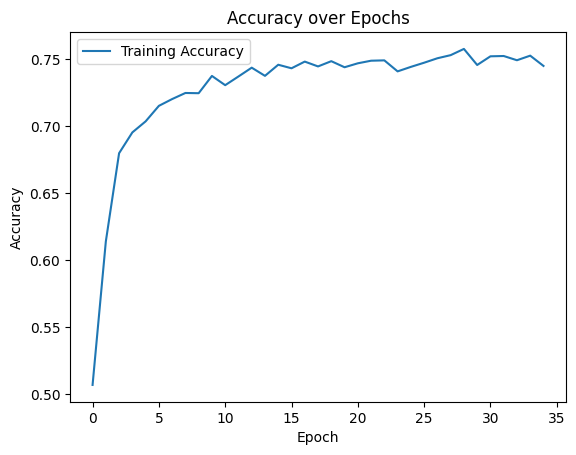




Hidden dim 40

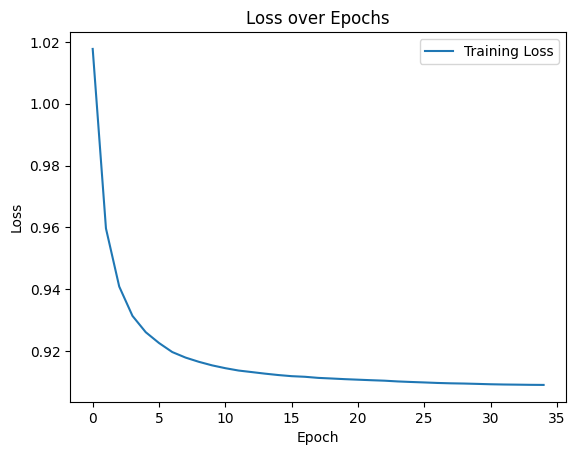
Peak in epoch 28 Accuracy: 0.7574368150301946

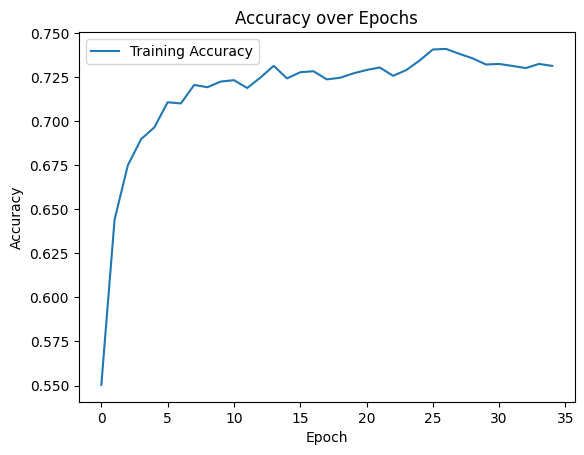




Hidden dim 60

Peak in epoch 26 Accuracy: 0.7409456740442656



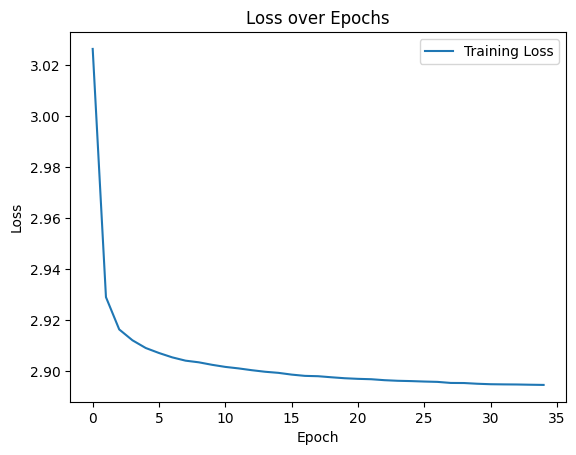


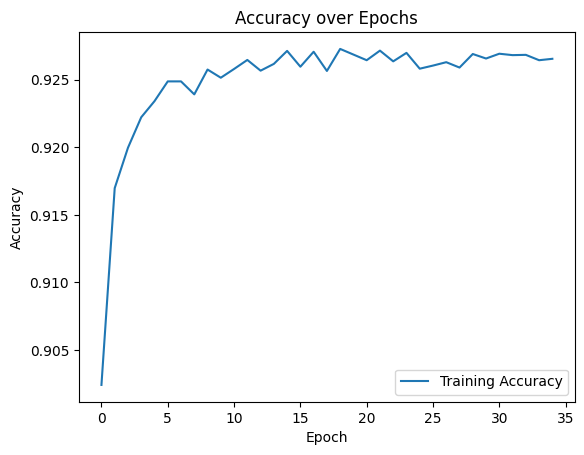
POS

Tagger 3 with pre trained vectors

Hidden dim 20

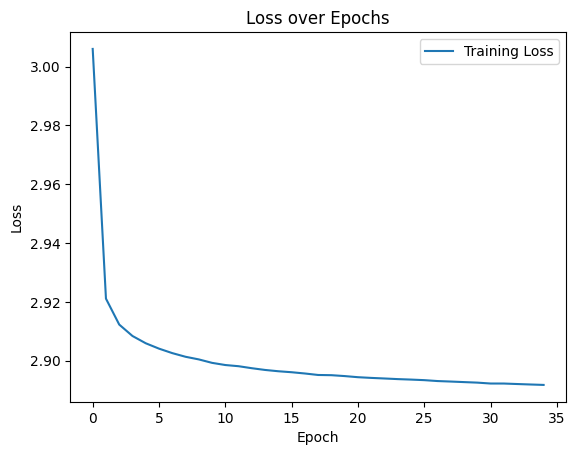
Peak in epoch 18 with Accuracy: 0.9272693102800226

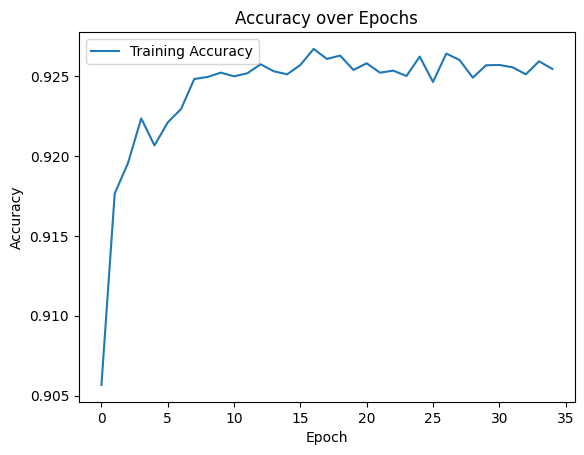




Hidden dim 40

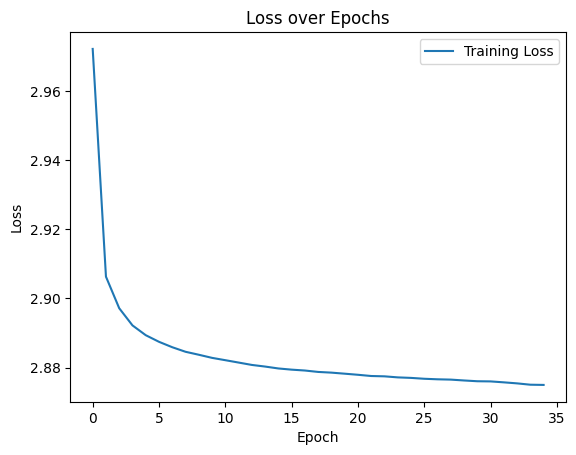
Peak in epoch 16 Accuracy: 0.9266846248616593

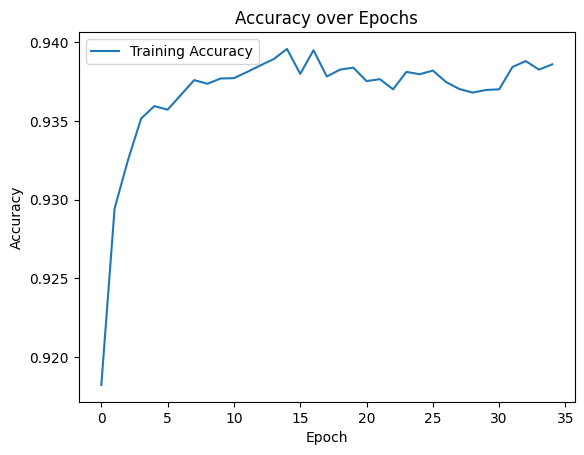




Hidden dim 60

Peak in epoch 14 Accuracy: 0.9395894673098206



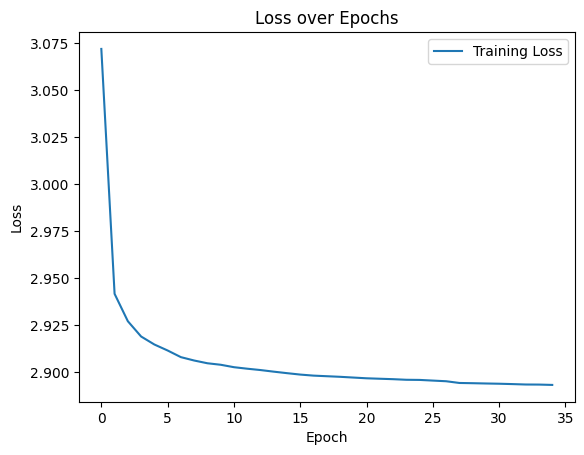


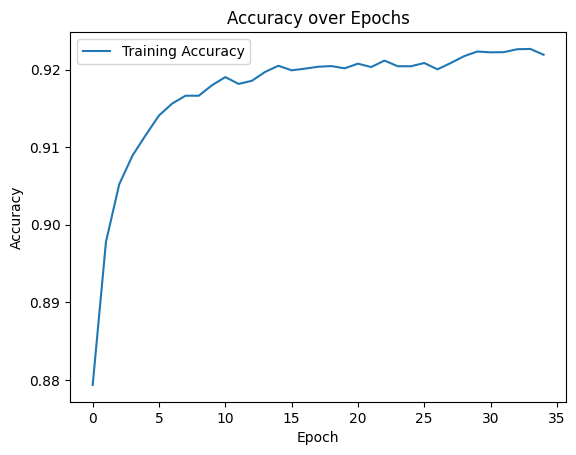
POS

Tagger 3 without pre trained vecs

Hidden dim 20

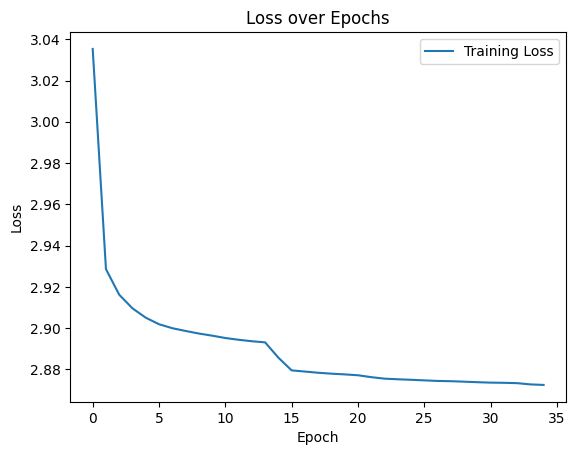
Accuracy Peak in epoch 33 with 0.9226753534214538

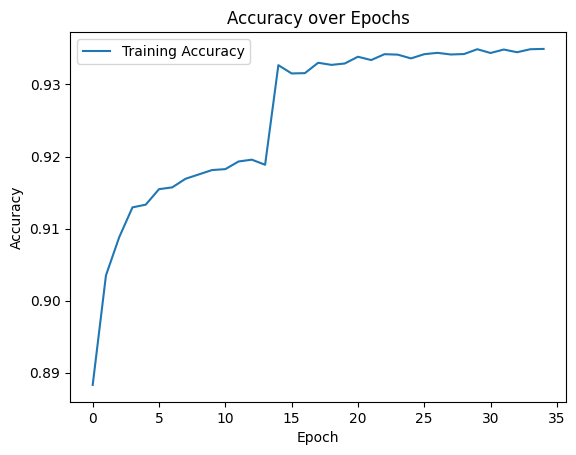




Hidden dim 40

Accuracy Peak in epoch 34 with 0.9349328655849987





Hidden dim 60

Accuracy Peak in epoch 30 with 0.9412182338324041

