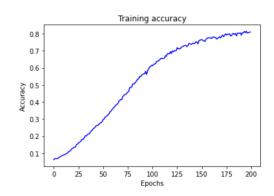
We have used different activation functions to compare training accuracy and training loss as well as see the result obtained for various input sentences.

#### Relu and Softmax

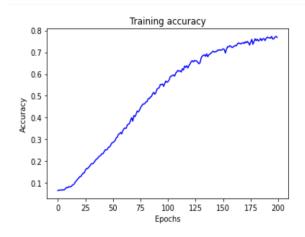


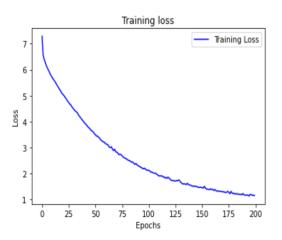


## Input sentence:- "The weather is nice "

```
['the weather is nice near now',
 'better silver now the emits enough',
 'about dream genius in their love',
 'to cottage books god that enough',
 'celestial sweet themselves there with down',
'he believe into the glory of',
 'the old way in the milky',
 'way who think i may be',
 'on all all who may love',
 'beside green turns distant brokers and',
 'grieve the bay creature stare soft',
 'over was come in say nearer',
 'it me simple dreams over we',
 'never was good that enough up',
 'was boy as a thoughts and',
 'a is everything old from was',
'those who those who too sea',
 'where the thoughts of be a',
 'thoughts is and and summer old']
```

## Relu and sigmoid

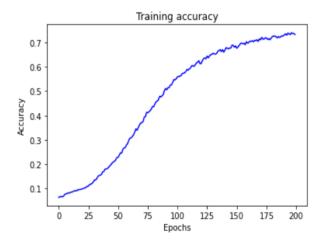


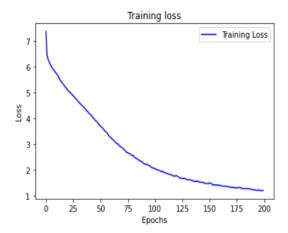


## Input sentence:- "Once upon a time "

```
['Once apon a time and',
 'could follow slushy gold can',
 'the withered bracken by the',
 'upland slopes i have been',
 'at then her weed minds',
 'passionate be doing but and',
 'there swing swing minds belong',
 'minds minds minds well himself',
 'like this way ah minds',
 'that firm maple applause bright',
 'harness bells a year or',
 'thirty to minds minds minds',
 'minds deep the school that',
 'is minds minds minds',
 'stars or minds mirth minds',
 'well minds brought minds year',
 'stars nor light on minds',
 'grim minds miranda minds minds',
 'minds stars minds minds well',
 'himself minds minds well saved',
 'a world too wide minds',
 'deep minds minds off how',
 'minds they have their']
```

#### Selu and Softplus

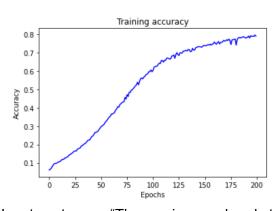


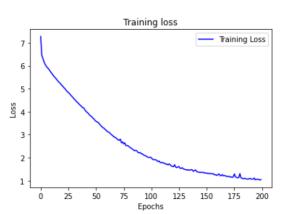


Input sentence:- "Blue skies and deep ocean"

The music was already turning sad the chosen way and the wind's song and the seas again for the running beneath minds minds song are smallest not minds minds glooms minds minds been and about peony year by was hurry losin' dreams always ship and minds minds be bruised and dread smallest minds been a silver string hum been a dew minds minds minds but about peony get peony grow get hurry weeds use will drums wind's minds bruised minds glooms about sail unawares hear themselves flake here and night great screen now you not save you the running tide of his mate life a white sail's shaking where a smallest tyger bruised still screen minds minds glooms minds minds of forget bruised and peony peony always smallest minds minds minds deep town to hear the smallest way and the running tide of a hesperides bruised minds bruised minds bruised minds minds

#### Tanh and Softmax





Input sentence:- "The music was already turning sad"

```
['blue skies and deep oceans',
 'let me unremembering reason why',
'each dare be pass away',
'by cutting a whole poverty',
'away from earth knife of',
 'dream of drums-so cautious to',
 'suffice cautious of of eyes',
 'follow across of lakes may',
 'be destroyed overnight found himself',
 'on the star thick mountain',
 'crusts with his perch and',
 'twirl mate my feet how',
 'they can dance myself out',
 'over my gypsy sunny mouth',
 'by me of an object',
 'toward the lovely line leafless',
 'high up tomorrow of toward',
 'universal tower of ease nots',
 'of see see leaf nor',
 'just of pensive god repeating',
 'you do destroyed found himself'
"midsummer's known street an hour",
 'churlish and harden of bird']
```

Comparison of Training loss and Training Accuracy for different activation functions.

# TABLE III accuracy and loss generated after 250 epochs

Activation Functions used	Training Accuracy	Training Loss
Relu and Softmax	0.8108	0.9686
Relu and Sigmoid	0.7681	1.1525
Selu and Softplus	0.7328	1.2073
Tanh and Softmax	0.7887	1.0518