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Homework Assignment 5

Problem 1:

The accuracy of the Neural Network Model to predict class labels for the Iris data set is described below.

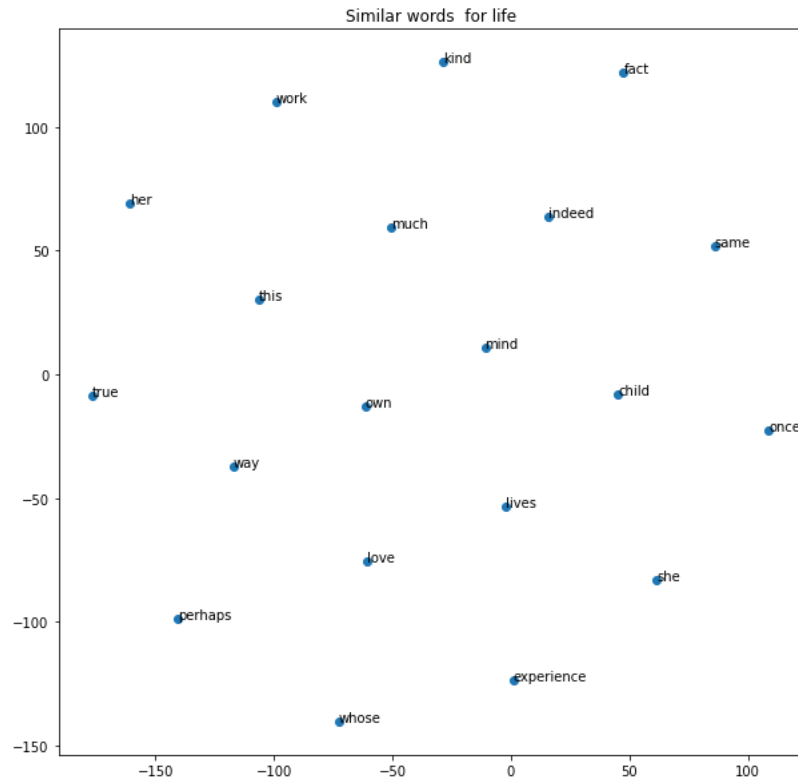| Set	Accuracy	Loss
Training	95.33%	0.1492
Validation	100%	0.1595
Testing	100%	0.15139

Problem 2:

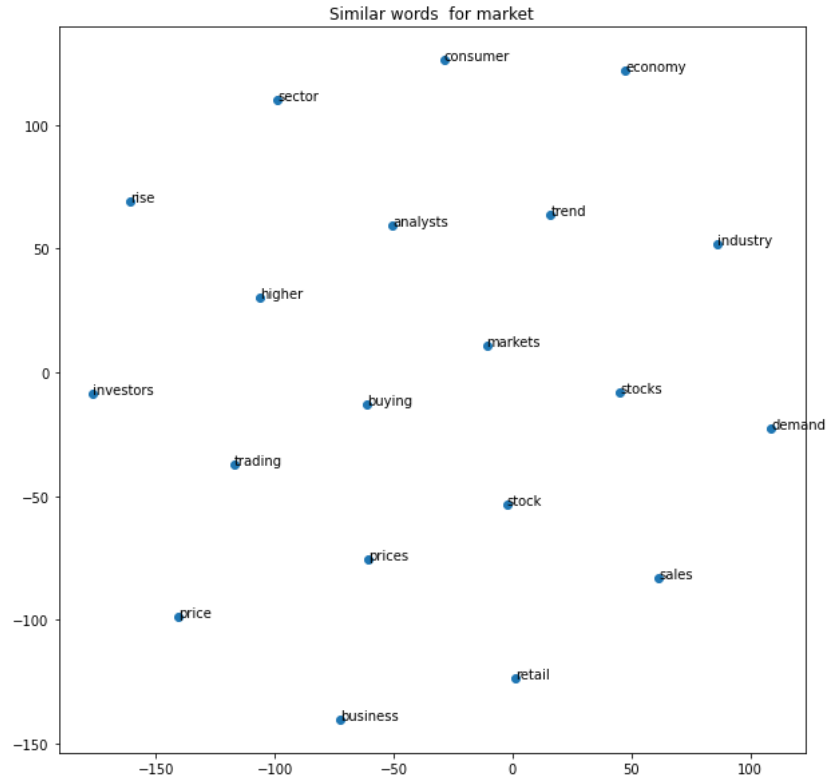Below are the 20 most similar words using cosine similarity for the following words along with visualizations.

1. life
    i. 'mind'
    ii. 'love'
    iii. 'lives'
    iv. 'own'
    v. 'kind'
    vi. 'experience'
    vii. 'child'
    viii. 'perhaps'
    ix. 'she'
    x. 'whose'
    xi. 'indeed'
    xii. 'her'
    xiii. 'same'
    xiv. 'work'
    xv. 'true'
    xvi. 'way'
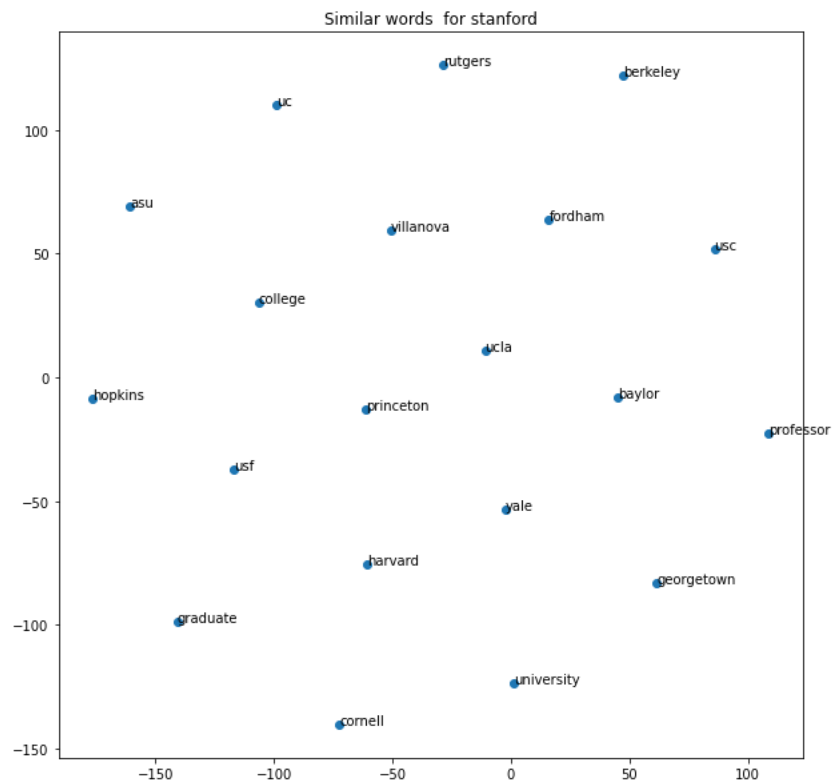   xvii. 'once'
    xviii. 'fact'
    xix. 'this'
    xx. 'much'

Similar words for life

2. market
    i. 'markets'
    ii. 'prices'
    iii. 'stock'
    iv. 'buying'
    v. 'consumer'
    vi. 'retail'
    vii. 'stocks'
    viii. 'price'
    ix. 'sales'
    x. 'business'
    xi. 'trend'
    xii. 'rise'
    xiii. 'industry'
    xiv. 'sector'
    xv. 'investors'
    xvi. 'trading'
    xvii. 'demand'
    xviii. 'economy'
    xix. 'higher'
    xx. 'analysts'

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Similar words for market

3. Stanford
    i. 'ucla'
    ii. 'harvard'
    iii. 'yale'
    iv. 'princeton'
    v. 'rutgers'
    vi. 'university'
    vii. 'baylor'
    viii. 'graduate'
    ix. 'graduate'
    x. 'cornell'
    xi. 'fordham'
    xii. 'asu'
    xiii. 'usc'
    xiv. 'uc'
    xv. 'hopkins'
    xvi. 'usf'
    xvii. 'professor'
    xviii. 'berkeley'
    xix. 'college'
    xx. 'villanova'

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Similar words for stanford

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Visualization for all words in the word embeddings file.

Words in the file