# Untitled

```python
import numpy as np
import wikipedia as wiki
```

Norm of a vector

```python
a = np.array([1,2,3,4,5])
np.linalg.norm(a)
```

7.416198487095663

Dot Product

```python
a = np.array([1,2,3,4,5])
b = np.array([5,6,7,8,9])
np.dot(a,b)
```

115

Cauchy-Schwarz Inequality

```python
np.dot(a,b)/(np.linalg.norm(a)*np.linalg.norm(b))
```

0.9710607611177229

```python
a = wiki.page('jungle book', auto_suggest = False)
b = wiki.page('Harry Potter', auto_suggest = False)
c = wiki.page('Tarzan', auto_suggest = False)
```

Counting Number of words in each book

```python
print(len(a.content.split()))
print(len(b.content.split()))
print(len(c.content.split()))
```

```
2418
9515
5760
```

Import text to vectors

```python
from sklearn.feature_extraction.text import CountVectorizer, TfidfVectorizer
```

Vector the article