

NLP - JAN 13

Task 1

In []:

```
# http://bit.ly/3IOI5JF
```

In [1]:

```
def gender_features(word):  
    return {'last_letter': word[-1]}
```

In [2]:

```
gender_features('Chiru')
```

Out[2]:

```
{'last_letter': 'u'}
```

In [3]:

```
from nltk.corpus import names
```

In [6]:

```
labeled_names = [(name, 'male') for name in names.words('male.txt')] + [(name, 'female') fo
```

In [7]:

```
labeled_names
```

Out[7]:

```
[('Aamir', 'male'),  
 ('Aaron', 'male'),  
 ('Abbey', 'male'),  
 ('Abbie', 'male'),  
 ('Abbot', 'male'),  
 ('Abbott', 'male'),  
 ('Abby', 'male'),  
 ('Abdel', 'male'),  
 ('Abdul', 'male'),  
 ('Abdulkarim', 'male'),  
 ('Abdullah', 'male'),  
 ('Abe', 'male'),  
 ('Abel', 'male'),  
 ('Abelard', 'male'),  
 ('Abner', 'male'),  
 ('Abraham', 'male'),  
 ('Abram', 'male'),  
 ('Ace', 'male').
```

In [8]:

```
import random
random.shuffle(labeled_names)
```

In [9]:

```
featuresets = [(gender_features(n), gender) for (n, gender) in labeled_names]
```

In [10]:

```
train_set, test_test = featuresets[500:], featuresets[:500]
```

In [11]:

```
import nltk
classifier = nltk.NaiveBayesClassifier.train(train_set)
```

In [12]:

```
classifier.classify(gender_features('obama'))
```

Out[12]:

```
'female'
```

In [13]:

```
print(nltk.classify.accuracy(classifier, test_test))
```

```
0.776
```

In []: