

Program:

```
from nltk.corpus import stopwords
from nltk.corpus import words
```

```
def tokenize(s):
```

```
    #split by white text
    space_split = list(s.split())
```

```
    #dealing with punctuations
    punctuation = [',', '.', '!', '?']
```

```
    tokens=[]
    for i in space_split:
        f=0
        for j in punctuation:
            if j in i:
                tokens.append(i.replace(j, ""))
                tokens.append(j)
                f=1
        if f==0:
            tokens.append(i)
```

```
    #dealing with 'm and 's
    tokens2 = []
    for i in tokens:
        if '\s' in i:
            tokens2.append(i.replace('\s', ""))
            tokens2.append('\s')
        elif '\m' in i:
            tokens2.append(i.replace('\m', ""))
            tokens2.append('am')
        else:
            tokens2.append(i)
    for i in tokens:
        if '-' in i:
            a,b = i.split('-',1)
            tokens2.append(a)
            tokens2.append('-')
            tokens2.append(b)
```

```
    return tokens2
```

```
def remove_stop_words(a):
```

```
    stop_words = set(stopwords.words('english'))
```

```
b = [w for w in a if w not in stop_words]
return b
```

```
def filter(s):
    b=[]
    for i in s:
        if i in words.words():
            b.append(i)
    return b
```

```
with open('text.txt', 'r+') as f:
    data=f.read()
print("Text:", "\n", data)
tokens = tokenize(data)
print("\nTokens: ", tokens)
```

```
filtered_words = filter(tokens)
print("\n\nFiltered Words: ", filtered_words)
```

Output:

Text:

This is a sample sentence, showing off the stop words filtration.

I'm rey's friend. I worked hard.

Khana khaya kya

Python is a high-level, interpreted, interactive and object-oriented scripting language. Python is designed to be highly readable. It uses English keywords frequently where as other languages use punctuation.

Tokens: ['This', 'is', 'a', 'sample', 'sentence', ',', 'showing', 'off', 'the', 'stop', 'words', 'filtration', ',', 'I', 'am', 'rey', "'s", 'friend', ',', 'I', 'worked', 'hard', ',', 'Khana', 'khaya', 'kya', 'Python', 'is', 'a', 'high-level', ',', 'interpreted', ',', 'interactive', 'and', 'object-oriented', 'scripting', 'language', ',', 'Python', 'is', 'designed', 'to', 'be', 'highly', 'readable', ',', 'It', 'uses', 'English', 'keywords', 'frequently', 'where', 'as', 'other', 'languages', 'use', 'punctuation', ',', 'high', '-', 'level', 'object', '-', 'oriented']

Filtered Words: ['is', 'a', 'sample', 'sentence', 'showing', 'off', 'the', 'stop', 'filtration', 'I', 'am', 'friend', 'I', 'worked', 'hard', 'is', 'a', 'interactive', 'and', 'language', 'is', 'designed', 'to', 'be', 'highly', 'readable', 'English', 'frequently', 'where', 'as', 'other', 'use', 'punctuation', 'high', 'level', 'object']