

```
import numpy as np
churchill = open(r'/content/eminem_rap', 'r')
keywords = churchill.read()
#rint(keywords)
```

```
keylist = []
for i in range(len(keywords)-1):
    keylist.append((keywords[i], keywords[i+1]))
#print(keylist)
```

```
# Create key-value pairs based on follow-up words
word_dict = {}
for beginning, following in keylist:
    if beginning in word_dict.keys():
        word_dict[beginning].append(following)
    else:
        word_dict[beginning] = [following]
#print(word_dict)
```

```
# Generate the first word and append to a list
first_word = np.random.choice(keywords)
while first_word.islower():
    first_word = np.random.choice(keywords)
word_chain = [first_word]
print(word_chain)

[np.str_('Rap')]
```

```
# Append new words based on Markov model to a list
WORDCOUNT = 40
for i in range(WORDCOUNT):
    word_chain.append(np.random.choice(word_dict[word_chain[-1]]))
```

```
# Form a sentence from the list of words
sentence = ' '.join(word_chain)
print(sentence)
```

Rap God, Rap God, Rap God All I do when it beans, it's goin' to get into consideration

```
for i in range(10):
    # Generate the first word and append to a list
    first_word = np.random.choice(keywords)
    while first_word.islower():
        first_word = np.random.choice(keywords)
    word_chain = [first_word]
    print(word_chain, " : ")

    # Append new words based on Markov model to a list
```

```
WORDCOUNT = 40
for j in range(WORDCOUNT):
    word_chain.append(np.random.choice(word_dict[word_chain[-1]]))

# Form a sentence from the list of words
sentence = ' '.join(word_chain)
print(sentence)

[np.str_('I')] :
I know you lie Now you're on) Just gonna know his – and I'm not knowing when Fabolous
[np.str_('Volkswagen,')] :
Volkswagen, tailspin, bucket matches my voice when you're not blow? All my Pharoahs M
[np.str_('If')] :
If you're not afraid to get this one chance (six minutes, Slim be a vehicle to, "Bus
[np.str_('Screw')] :
Screw it, to love, you're not be woken I'm not done V-venomous, the front to slap bo
[np.str_('I')] :
I had enough, now you lie Now I been a 24-7 special on salary, paid hourly Until he k
[np.str_('Mathers')] :
Mathers LP 1 when it's all hell with the) Venom, (I got that) adrenaline momentum And
[np.str_("I'm")] :
I'm Ready to ask him why be a raw deal Sets you to bake 'em Now I lead a new school t
[np.str_('Monch')] :
Monch grind So I love the game, like something's about to go get into the Boyz, stil
[np.str_('Well,')] :
Well, that's why or warm fuzzy feelin', yeah, them into the way So this paper before
[np.str_("I'm")] :
I'm Ever gonna stand there and I'm loco Became a game called circle and the ground Re
```