In [20]:
```python
# ANALYZING Dr. Martin Luther King Jr.'s I HAVE A DREAM SPEECH - Raw Sentimental Analysis
# By Symon Kimitei
# Aspiring Data Scientists
# Working only with lists and Dictionaries in sentimental analysis
#=================================================================
# Import all the library dependencies
import pandas as pd
import numpy as np
import matplotlib. pyplot as plt
# Import the data
from wordcloud import WordCloud, STOPWORDS
from wordcloud import WordCloud, ImageColorGenerator
from collections import Counter
from PIL import Image
from io import open
```

In [45]:
```python
# Import the I have a dream speech as a textfile. This speech was delivered by Dr. Martin Luther King Jr. in
dream = open("/Users/skimitei/Desktop/anaconda/dream.txt","r")

```

In [46]:
```python
# Create an empty dictionary to store the keys(words) and Count of the frequency of unique words spoken by D
counts = dict()
```

In [47]:

```python
# Split the dream speech text into a list of words
words = dream.read().split()

words=map(str, words)

print(words)
```

['I', 'am', 'happy', 'to', 'join', 'with', 'you', 'today', 'in', 'what', 'will', 'go', 'down', 'in', 'history', 'as', 'the', 'greatest', 'demonstration', 'for', 'freedom', 'in', 'the', 'history', 'of', 'our', 'nation.', 'Five', 'score', 'years', 'ago,', 'a', 'great', 'American,', 'in', 'whose', 'symbolic', 'shadow', 'we', 'stand', 'today,', 'signed', 'the', 'Emancipation', 'Proclamation.', 'This', 'momentous', 'decree', 'came', 'as', 'a', 'great', 'beacon', 'light', 'of', 'hope', 'to', 'millions', 'of', 'Negro', 'slaves', 'who', 'had', 'been', 'seared', 'in', 'the', 'flames', 'of', 'withering', 'injustice.', 'It', 'came', 'as', 'a', 'joyous', 'daybreak', 'to', 'end', 'the', 'long', 'night', 'of', 'their', 'captivity.', 'But', 'one', 'hundred', 'years', 'later,', 'the', 'Negro', 'still', 'is', 'not', 'free.', 'One', 'hundred', 'years', 'later,', 'the', 'life', 'of', 'the', 'Negro', 'is', 'still', 'sadly', 'crippled', 'by', 'the', 'manacles', 'of', 'segregation', 'and', 'the', 'chains', 'of', 'discrimination.', 'One', 'hundred', 'years', 'later,', 'the', 'Negro', 'lives', 'on', 'a', 'lonely', 'island', 'of', 'poverty', 'in', 'the', 'midst', 'of', 'a', 'vast', 'ocean', 'of', 'material', 'prosperity.', 'One', 'hundred', 'years', 'later,', 'the', 'Negro', 'is', 'still', 'languished', 'in', 'the', 'corners', 'of', 'American', 'society', 'and', 'finds', 'himself', 'an', 'exile', 'in', 'his', 'own', 'land.', 'And', 'so', "we've", 'come', 'here', 'today', 'to', 'dramatize', 'a', 'shameful', 'condition.', 'In', 'a', 'sense', "we've", 'come', 'to', 'our', "nation's", 'capital', 'to', 'cash', 'a', 'check.', 'When', 'the', 'architects', 'of', 'our', 'republic', 'wrote', 'the', 'magnificent', 'words', 'of', 'the', 'Constitution', 'and', 'the', 'Declaration', 'of', 'Independence,', 'they', 'were', 'signing', 'a', 'promissory', 'note', 'to', 'which', 'every', 'American', 'was', 'to', 'fall', 'heir.', 'This', 'note', 'was', 'a', 'promise', 'that', 'all', 'men,', 'yes,', 'black', 'men', 'as', 'well', 'as', 'white', 'men,',

In [54]:

```python
#Count and save the frequency of words under each key(word)
for word in words:
    counts[word]=counts.get(word,0)+1 # Count the frequency of unique words
#strip unicode string from the list so that the word list do not begin with u

print(counts)
```

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```
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akable': 2}
```

```
In [56]:  1  # Convert the Count dictionary into a data frame.
          2  dreamBigWords=pd.DataFrame.from_dict(counts, orient='index')
          3
```
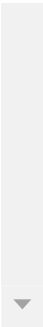
```
In [57]:  1  # Name the first column as Count
          2  dreamBigWords.columns=["Count"]
          3  # Name the index column as Key (word)
          4  dreamBigWords.index.names = ['Word']
```

In [62]:
```python
1  # Subset the dreamBigWords data frame and save only words that had the greatest frequency in the speech
2  dreamBigWords = dreamBigWords[dreamBigWords.Count>= 20]
3  dreamBigWords
```

Out[62]:

Word	Count
the	202
of	198
to	118
and	82
a	74
be	66
will	54
that	46
is	46
in	40
as	40
freedom	38
we	36
our	34
have	34
from	32
I	30
this	30
not	26
Negro	26
And	24
with	24

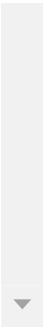| Word	Count
every	20
come	20
day	20
We	20

In [63]:
```python
# Sort the Count column in descending order
dreamBigWords = dreamBigWords.sort_values('Count',ascending=False)
dreamBigWords
```
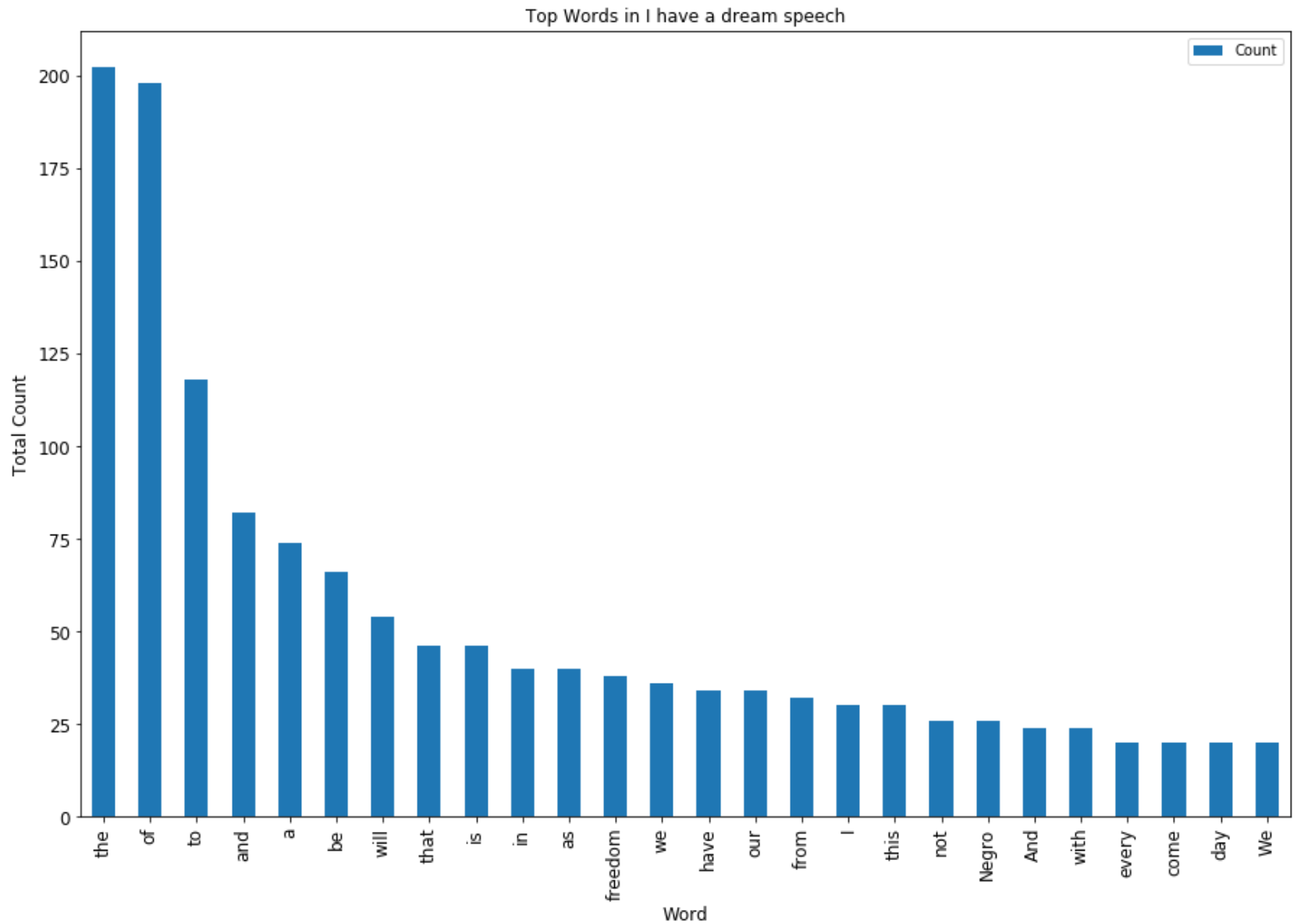
Out[63]:

Word	Count
the	202
of	198
to	118
and	82
a	74
be	66
will	54
that	46
is	46
in	40
as	40
freedom	38
we	36
have	34
our	34
from	32
I	30
this	30
not	26
Negro	26
And	24
with	24

Word	Count
every	20
come	20
day	20
We	20

In [66]:

```
1  # Create a Bar graph of the major words as used by Dr. Martin Luther King Jr in his speech
2  ax = dreamBigWords['Count'].plot(kind='bar', title ="Top Words in I have a dream speech", figsize=(15, 10),
3  ax.set_xlabel("Word", fontsize=12)
4  ax.set_ylabel("Total Count", fontsize=12)
5  plt.show()
```


Top Words in I have a dream speech

In [68]:

```
1  # Create a Word Cloud of the I have a dream speech
2
3  dream = open("/Users/skimitei/Desktop/anaconda/dream.txt","r")
4  counts = dict() # Create an empty dictionary
5
6  words = dream.read().split()  # Split the text into a list
7  words=map(str, words) #strip unicode string from the list so that the word list do not begin with u
8  #print(words)
9
10 #print('words:',words) # Print the list of words
11
12 #convert it to dictionary with values and its occurences
13 word_could_dict=Counter(words)
14
15 # print(word_could_dict) Print the word count dictionary
16 wordcloud = WordCloud(width = 1000, height = 500).generate_from_frequencies(word_could_dict)
17 plt.figure(figsize=(15,10))
18 plt.imshow(wordcloud)
19 plt.axis("off")
20 plt.show()
21 plt.savefig('MLKJr.png', bbox_inches='tight')
```

In [ ]:   1