```
In [1]:
import nltk
from nltk.corpus import brown
In [3]:
nltk.download
Out[3]:
<bound method Downloader.download of <nltk.downloader.Downloader object at</pre>
0x0000027410256668>>
In [ ]:
In [4]:
nltk.download
Out[4]:
<bound method Downloader.download of <nltk.downloader.Downloader object at</pre>
0x0000027410256668>>
In [5]:
from nltk.corpus import inaugural
In [18]:
inaugural.words(fileids = '1961-Kennedy.txt')
Out[18]:
['Vice', 'President', 'Johnson', ',', 'Mr', '.', ...]
In [17]:
nltk.download()
showing info https://raw.githubusercontent.com/nltk/nltk_data/gh-pages/ind
ex.xml
Out[17]:
True
```

```
In [20]:
fp = open('1961-Kennedy.txt', 'r')
FileNotFoundError
                                          Traceback (most recent call las
t)
<ipython-input-20-2116bc0c1f25> in <module>()
----> 1 fp = open('1961-Kennedy.txt', 'r')
FileNotFoundError: [Errno 2] No such file or directory: '1961-Kennedy.txt'
In [22]:
inaugural.words(fileids = '1961-Kennedy.txt')
Out[22]:
['Vice', 'President', 'Johnson', ',', 'Mr', '.', ...]
In [25]:
from nltk.corpus import brown
In [30]:
print(brown.words())
['The', 'Fulton', 'County', 'Grand', 'Jury', 'said', ...]
In [29]:
nltk.download('brown')
[nltk_data] Downloading package brown to
[nltk_data]
                C:\Users\hp\AppData\Roaming\nltk_data...
[nltk_data]
            Package brown is already up-to-date!
Out[29]:
True
In [32]:
from nltk.corpus import inaugural
In [34]:
print(inaugural.words())
['Fellow', '-', 'Citizens', 'of', 'the', 'Senate', ...]
```

In [36]:

nltk.corpus.inaugural.fileids()

#### Out[36]:

```
['1789-Washington.txt',
 '1793-Washington.txt',
 '1797-Adams.txt',
 '1801-Jefferson.txt',
 '1805-Jefferson.txt',
 '1809-Madison.txt',
 '1813-Madison.txt',
 '1817-Monroe.txt',
 '1821-Monroe.txt',
 '1825-Adams.txt',
 '1829-Jackson.txt',
 '1833-Jackson.txt',
 '1837-VanBuren.txt',
 '1841-Harrison.txt',
 '1845-Polk.txt',
 '1849-Taylor.txt',
 '1853-Pierce.txt',
 '1857-Buchanan.txt',
 '1861-Lincoln.txt',
 '1865-Lincoln.txt',
 '1869-Grant.txt',
 '1873-Grant.txt',
 '1877-Hayes.txt',
 '1881-Garfield.txt',
 '1885-Cleveland.txt',
 '1889-Harrison.txt',
 '1893-Cleveland.txt',
 '1897-McKinley.txt',
 '1901-McKinley.txt',
 '1905-Roosevelt.txt',
 '1909-Taft.txt',
 '1913-Wilson.txt',
 '1917-Wilson.txt',
 '1921-Harding.txt'
 '1925-Coolidge.txt',
 '1929-Hoover.txt',
 '1933-Roosevelt.txt',
 '1937-Roosevelt.txt',
 '1941-Roosevelt.txt',
 '1945-Roosevelt.txt',
 '1949-Truman.txt',
 '1953-Eisenhower.txt',
 '1957-Eisenhower.txt',
 '1961-Kennedy.txt',
 '1965-Johnson.txt',
 '1969-Nixon.txt',
 '1973-Nixon.txt',
 '1977-Carter.txt',
 '1981-Reagan.txt',
 '1985-Reagan.txt',
 '1989-Bush.txt',
 '1993-Clinton.txt',
 '1997-Clinton.txt',
 '2001-Bush.txt',
 '2005-Bush.txt',
 '2009-Obama.txt']
```

```
In [41]:
```

```
string = inaugural.raw('2009-Obama.txt')
```

# In [87]:

```
words = string.split()
for i in range(len(words)):
    words[i] = words[i].lower()
```

In	881	•
ın	1 00 1	•

print(words)

['my', 'fellow', 'citizens:', 'i', 'stand', 'here', 'today', 'humbled', 'b y', 'the', 'task', 'before', 'us,', 'grateful', 'for', 'the', 'trust', 'yo u', 'have', 'bestowed,', 'mindful', 'of', 'the', 'sacrifices', 'borne', 'b y', 'our', 'ancestors.', 'i', 'thank', 'president', 'bush', 'for', 'his', 'service', 'to', 'our', 'nation,', 'as', 'well', 'as', 'the', 'generosit y', 'and', 'cooperation', 'he', 'has', 'shown', 'throughout', 'this', 'tra nsition.', 'forty-four', 'americans', 'have', 'now', 'taken', 'the', 'pres idential', 'oath.', 'the', 'words', 'have', 'been', 'spoken', 'during', 'r ising', 'tides', 'of', 'prosperity', 'and', 'the', 'still', 'waters', 'o f', 'peace.', 'yet,', 'every', 'so', 'often', 'the', 'oath', 'is', 'take n', 'amidst', 'gathering', 'clouds', 'and', 'raging', 'storms.', 'at', 'th ese', 'moments,', 'america', 'has', 'carried', 'on', 'not', 'simply', 'bec ause', 'of', 'the', 'skill', 'or', 'vision', 'of', 'those', 'in', 'high', 'office,', 'but', 'because', 'we', 'the', 'people', 'have', 'remained', 'f aithful', 'to', 'the', 'ideals', 'of', 'our', 'forbearers,', 'and', 'tru aithful', 'to', 'the', 'ideals', of, our, roroca.c.5,,
e', 'to', 'our', 'founding', 'documents.', 'so', 'it', 'has', 'been.', 's
' ''-' 'with' 'this' 'generation', 'of', 'americans.', 'that', 'we', 'are', 'in', 'the', 'midst', 'of', 'crisis', 'is', 'now', 'w ell', 'understood.', 'our', 'nation', 'is', 'at', 'war,', 'against', 'a', 'far-reaching', 'network', 'of', 'violence', 'and', 'hatred.', 'our', 'eco nomy', 'is', 'badly', 'weakened,', 'a', 'consequence', 'of', 'greed', 'an 'irresponsibility', 'on', 'the', 'part', 'of', 'some,', 'but', 'also', 'our', 'collective', 'failure', 'to', 'make', 'hard', 'choices', 'and', 'p repare', 'the', 'nation', 'for', 'a', 'new', 'age.', 'homes', 'have', 'bee n', 'lost;', 'jobs', 'shed;', 'businesses', 'shuttered.', 'our', 'health', 'care', 'is', 'too', 'costly;', 'our', 'schools', 'fail', 'too', 'many;', 'and', 'each', 'day', 'brings', 'further', 'evidence', 'that', 'the', 'way s', 'we', 'use', 'energy', 'strengthen', 'our', 'adversaries', 'and', 'thr eaten', 'our', 'planet.', 'these', 'are', 'the', 'indicators', 'of', 'cris is,', 'subject', 'to', 'data', 'and', 'statistics.', 'less', 'measurable', 'but', 'no', 'less', 'profound', 'is', 'a', 'sapping', 'of', 'confidence', 'across', 'our', 'land', '--', 'a', 'nagging', 'fear', 'that', "americ a's", 'decline', 'is', 'inevitable,', 'that', 'the', 'next', 'generation', 'must', 'lower', 'its', 'sights.', 'today', 'i', 'say', 'to', 'you', 'that', 'the', 'challenges', 'we', 'face', 'are', 'real.', 'they', 'are', 'ser ious', 'and', 'they', 'are', 'many.', 'they', 'will', 'not', 'be', 'met', 'easily', 'or', 'in', 'a', 'short', 'span', 'of', 'time.', 'but', 'know', 'this,', 'america', '--', 'they', 'will', 'be', 'met.', 'on', 'this', 'da y,', 'we', 'gather', 'because', 'we', 'have', 'chosen', 'hope', 'over', 'f ear,', 'unity', 'of', 'purpose', 'over', 'conflict', 'and', 'discord.', 'o n', 'this', 'day,', 'we', 'come', 'to', 'proclaim', 'an', 'end', 'to', 'th e', 'petty', 'grievances', 'and', 'false', 'promises,', 'the', 'recriminat ions', 'and', 'worn-out', 'dogmas', 'that', 'for', 'far', 'too', 'long', 'have', 'strangled', 'our', 'politics.', 'we', 'remain', 'a', 'young', 'na tion,', 'but', 'in', 'the', 'words', 'of', 'scripture,', 'the', 'time', 'h as', 'come', 'to', 'set', 'aside', 'childish', 'things.', 'the', 'time', 'has', 'come', 'to', 'reaffirm', 'our', 'enduring', 'spirit;', 'to', 'choo se', 'our', 'better', 'history;', 'to', 'carry', 'forward', 'that', 'preci ous', 'gift,', 'that', 'noble', 'idea,', 'passed', 'on', 'from', 'generati on', 'to', 'generation:', 'the', 'god-given', 'promise', 'that', 'all', 'a re', 'equal,', 'all', 'are', 'free,', 'and', 'all', 'deserve', 'a', 'chanc e', 'to', 'pursue', 'their', 'full', 'measure', 'of', 'happiness.', 'in', 'reaffirming', 'the', 'greatness', 'of', 'our', 'nation,', 'we', 'understa nd', 'that', 'greatness', 'is', 'never', 'a', 'given.', 'it', 'must', 'b e', 'earned.', 'our', 'journey', 'has', 'never', 'been', 'one', 'of', 'sho rtcuts', 'or', 'settling', 'for', 'less.', 'it', 'has', 'not', 'been', 'the', 'path', 'for', 'the', 'faint-hearted', '--', 'for', 'those', 'who', 'p refer', 'leisure', 'over', 'work,', 'or', 'seek', 'only', 'the', 'pleasure s', 'of', 'riches', 'and', 'fame.', 'rather,', 'it', 'has', 'been', 'the', 'risk-takers,', 'the', 'doers,', 'the', 'makers', 'of', "things'some", 'ce lebrated', 'but', 'more', 'often', 'men', 'and', 'women', 'obscure', 'in',

'their', 'labor,', 'who', 'have', 'carried', 'us', 'up', 'the', 'long,', 'rugged', 'path', 'towards', 'prosperity', 'and', 'freedom.', 'for', 'u s,', 'they', 'packed', 'up', 'their', 'few', 'worldly', 'possessions', 'and 'traveled', 'across', 'oceans', 'in', 'search', 'of', 'a', 'new', 'lif e.', 'for', 'us,', 'they', 'toiled', 'in', 'sweatshops', 'and', 'settled', 'the', 'west;', 'endured', 'the', 'lash', 'of', 'the', 'whip', 'and', 'plo wed', 'the', 'hard', 'earth.', 'for', 'us,', 'they', 'fought', 'and', 'die d,', 'in', 'places', 'like', 'concord', 'and', 'gettysburg;', 'normandy', 'and', 'khe', 'sahn.', 'time', 'and', 'again', 'these', 'men', 'and', 'wom en', 'struggled', 'and', 'sacrificed', 'and', 'worked', 'till', 'their', 'hands', 'were', 'raw', 'so', 'that', 'we', 'might', 'live', 'a', 'bette r', 'life.', 'they', 'saw', 'america', 'as', 'bigger', 'than', 'the', 'su m', 'of', 'our', 'individual', 'ambitions;', 'greater', 'than', 'all', 'th e', 'differences', 'of', 'birth', 'or', 'wealth', 'or', 'faction.', 'this', 'is', 'the', 'journey', 'we', 'continue', 'today.', 'we', 'remain', 'the', 'most', 'prosperous,', 'powerful', 'nation', 'on', 'earth.', 'our', 'workers', 'are', 'no', 'less', 'productive', 'than', 'when', 'this', 'crisis', 'began.', 'our', 'minds', 'are', 'no', 'less', 'inventive,', 'our', 'goods', 'and', 'services', 'no', 'less', 'needed', 'than', 'they', 'were', 'last', 'week', 'or', 'last', 'month', 'or', 'last', 'year.', 'our', 'capacity', 'remains', 'undiminished.', 'but', 'our', 'time', 'of', 'standing', 'not 'last', 'or', 'last', 'or', 'last', 'or', 'standing', 'not 'last', 'or', 'last', 'las ing', 'pat,', 'of', 'protecting', 'narrow', 'interests', 'and', 'putting',
'off', 'unpleasant', 'decisions', '--', 'that', 'time', 'has', 'surely',
'passed.', 'starting', 'today,', 'we', 'must', 'pick', 'ourselves', 'up,', 'dust', 'ourselves', 'off,', 'and', 'begin', 'again', 'the', 'work', 'of', 'remaking', 'america.', 'for', 'everywhere', 'we', 'look,', 'there', 'is', 'work', 'to', 'be', 'done.', 'the', 'state', 'of', 'our', 'economy', 'call s', 'for', 'action,', 'bold', 'and', 'swift,', 'and', 'we', 'will', 'act', '--', 'not', 'only', 'to', 'create', 'new', 'jobs,', 'but', 'to', 'lay', 'a', 'new', 'foundation', 'for', 'growth.', 'we', 'will', 'build', 'the', 'aradal | 'roads', 'and', 'bridges,', 'the', 'electric', 'grids', 'and', 'digital', 'lines', 'that', 'feed', 'our', 'commerce', 'and', 'bind', 'us', 'togethe r.', 'we', 'will', 'restore', 'science', 'to', 'its', 'rightful', 'plac e,', 'and', 'wield', "technology's", 'wonders', 'to', 'raise', 'health', "care's", 'quality', 'and', 'lower', 'its', 'cost.', 'we', 'will', 'harnes s', 'the', 'sun', 'and', 'the', 'winds', 'and', 'the', 'soil', 'to', 'fue l', 'our', 'cars', 'and', 'run', 'our', 'factories.', 'and', 'we', 'will', 'transform', 'our', 'schools', 'and', 'colleges', 'and', 'universities', 'to', 'meet', 'the', 'demands', 'of', 'a', 'new', 'age.', 'all', 'this', 'we', 'can', 'do.', 'all', 'this', 'we', 'will', 'do.', 'now,', 'there', 'are', 'some', 'who', 'question', 'the', 'scale', 'of', 'our', 'ambition s', '--', 'who', 'suggest', 'that', 'our', 'system', 'cannot', 'tolerate', 'too', 'many', 'big', 'plans.', 'their', 'memories', 'are', 'short.', 'fo r', 'they', 'have', 'forgotten', 'what', 'this', 'country', 'has', 'alread y', 'done;', 'what', 'free', 'men', 'and', 'women', 'can', 'achieve', 'whe n', 'imagination', 'is', 'joined', 'to', 'common', 'purpose,', 'and', 'nec essity', 'to', 'courage.', 'what', 'the', 'cynics', 'fail', 'to', 'underst and', 'is', 'that', 'the', 'ground', 'has', 'shifted', 'beneath', 'them', '--', 'that', 'the', 'stale', 'political', 'arguments', 'that', 'have', 'c '--', 'that', 'the', 'stale', 'political', 'arguments', 'that', 'have', 'c onsumed', 'us', 'for', 'so', 'long', 'no', 'longer', 'apply.', 'the', 'que stion', 'we', 'ask', 'today', 'is', 'not', 'whether', 'our', 'government', 'is', 'too', 'big', 'or', 'too', 'small,', 'but', 'whether', 'it', 'work s', '--', 'whether', 'it', 'helps', 'families', 'find', 'jobs', 'at', 'a', 'decent', 'wage,', 'care', 'they', 'can', 'afford,', 'a', 'retirement', 't hat', 'is', 'dignified.', 'where', 'the', 'answer', 'is', 'yes,', 'we', 'i ntend', 'to', 'move', 'forward.', 'where', 'the', 'answer', 'is', 'no,', 'programs', 'will', 'end.', 'and', 'those', 'of', 'us', 'who', 'manage', 'the', "public's", 'dollars', 'will', 'be', 'held', 'to', 'account', '--', 'to', 'spend', 'wisely,', 'reform', 'bad', 'habits,', 'and', 'do', 'our', 'business', 'in', 'the', 'light', 'of', 'day', '--', 'because', 'only', 't hen', 'can', 'we', 'restore', 'the', 'vital', 'trust', 'between', 'a', 'pe

ople', 'and', 'their', 'government.', 'nor', 'is', 'the', 'question', 'bef ore', 'us', 'whether', 'the', 'market', 'is', 'a', 'force', 'for', 'good', 'or', 'ill.', 'its', 'power', 'to', 'generate', 'wealth', 'and', 'expand', 'freedom', 'is', 'unmatched,', 'but', 'this', 'crisis', 'has', 'reminded', 'us', 'that', 'without', 'a', 'watchful', 'eye,', 'the', 'market', 'can', 'spin', 'out', 'of', 'control', '--', 'the', 'nation', 'cannot', 'prospe r', 'long', 'when', 'it', 'favors', 'only', 'the', 'prosperous.', 'the', 'success', 'of', 'our', 'economy', 'has', 'always', 'depended', 'not', 'ju st', 'on', 'the', 'size', 'of', 'our', 'gross', 'domestic', 'product,', 'b ut', 'on', 'the', 'reach', 'of', 'our', 'prosperity;', 'on', 'the', 'abili ty', 'to', 'extend', 'opportunity', 'to', 'every', 'willing', 'heart', '--', 'not', 'out', 'of', 'charity,', 'but', 'because', 'it', 'is', 'the', 's urest', 'route', 'to', 'our', 'common', 'good.', 'as', 'for', 'our', 'common', 'defense,', 'we', 'reject', 'as', 'false', 'the', 'choice', 'betwee n', 'our', 'safety', 'and', 'our', 'ideals.', 'our', 'founding', 'father s,', 'faced', 'with', 'perils', 'that', 'we', 'can', 'scarcely', 'imagin e,', 'drafted', 'a', 'charter', 'to', 'assure', 'the', 'rule', 'of', 'la w', 'and', 'the', 'rights', 'of', 'man,', 'a', 'charter', 'expanded', 'b y', 'the', 'blood', 'of', 'generations.', 'those', 'ideals', 'still', 'lig ht'. 'the'. 'world.'. 'and', 'we', 'will', 'not', 'give', 'them', 'up', 'f st', 'on', 'the', 'size', 'of', 'our', 'gross', 'domestic', 'product,' ht', 'the', 'world,', 'and', 'we', 'will', 'not', 'give', 'them', 'up', 'f or', "expedience's", 'sake.', 'and', 'so', 'to', 'all', 'the', 'other', 'p eoples', 'and', 'governments', 'who', 'are', 'watching', 'today,', 'from', 'the', 'grandest', 'capitals', 'to', 'the', 'small', 'village', 'where', 'my', 'father', 'was', 'born:', 'know', 'that', 'america', 'is', 'a', 'fri end', 'of', 'each', 'nation', 'and', 'every', 'man,', 'woman,', 'and', 'ch ild', 'who', 'seeks', 'a', 'future', 'of', 'peace', 'and', 'dignity,', 'and', 'we', 'are', 'recall', 'that' d', 'we', 'are', 'ready', 'to', 'lead', 'once', 'more.', 'recall', 'that', 'earlier', 'generations', 'faced', 'down', 'fascism', 'and', 'communism', 'not', 'just', 'with', 'missiles', 'and', 'tanks,', 'but', 'with', 'the', 'sturdy', 'alliances', 'and', 'enduring', 'convictions.', 'they', 'underst ood', 'that', 'our', 'power', 'alone', 'cannot', 'protect', 'us,', 'nor', 'does', 'it', 'entitle', 'us', 'to', 'do', 'as', 'we', 'please.', 'instea d,', 'they', 'knew', 'that', 'our', 'power', 'grows', 'through', 'its', 'p rudent', 'use;', 'our', 'security', 'emanates', 'from', 'the', 'justness', 'the', 'grows', 'the', 'grows', 'the', 'justness', 'the', 'grows', 'the', 'justness', 'the', 'grows', 'the', 'justness', 'the', 'grows', 'grows', 'the', 'grows', 'the', 'grows', 'grows', 'the', 'grows', 'the', 'grows', 'grows', 'the', 'grows', 'grows', 'the', 'grows', 'of', 'our', 'cause,', 'the', 'force', 'of', 'our', 'example,', 'the', 'te mpering', 'qualities', 'of', 'humility', 'and', 'restraint.', 'we', 'are', 'the', 'keepers', 'of', 'this', 'legacy.', 'guided', 'by', 'these', 'princ iples', 'once', 'more,', 'we', 'can', 'meet', 'those', 'new', 'threats',
'that', 'demand', 'even', 'greater', 'effort', '--', 'even', 'greater', 'c ooperation', 'and', 'understanding', 'between', 'nations.', 'we', 'will', 'begin', 'to', 'responsibly', 'leave', 'iraq', 'to', 'its', 'people,', 'an d', 'forge', 'a', 'hard-earned', 'peace', 'in', 'afghanistan.', 'with', 'o ld', 'friends', 'and', 'former', 'foes,', 'we', 'will', 'work', 'tirelessly', 'to', 'lessen', 'the', 'nuclear', 'threat,', 'and', 'roll', 'back', 't he', 'specter', 'of', 'a', 'warming', 'planet.', 'we', 'will', 'not', 'apo logize', 'for', 'our', 'way', 'of', 'life,', 'nor', 'will', 'we', 'waver', 'in', 'its', 'defense,', 'and', 'for', 'those', 'who', 'seek', 'to', 'adva nce', 'their', 'aims', 'by', 'inducing', 'terror', 'and', 'slaughtering', 'innocents,', 'we', 'say', 'to', 'you', 'now', 'that', 'our', 'spirit', 'is', 'stronger', 'and', 'cannot', 'be', 'broken;', 'you', 'cannot', 'outlast', 'us,', 'and', 'we', 'will', 'defeat', 'you.', 'for', 'we', 'know', 'that', 'outlast', 'outlast', 'us,', 'and', 'we', 'will', 'defeat', 'you.', 'for', 'we', 'know', 'that', 'outlast', 'outlast' at', 'our', 'patchwork', 'heritage', 'is', 'a', 'strength,', 'not', 'a', 'weakness.', 'we', 'are', 'a', 'nation', 'of', 'christians', 'and', 'musli ms,', 'jews', 'and', 'hindus', '--', 'and', 'non-believers.', 'we', 'are', 'shaped', 'by', 'every', 'language', 'and', 'culture,', 'drawn', 'from', 'every', 'end', 'of', 'this', 'earth;', 'and', 'because', 'we', 'have', 't asted', 'the', 'bitter', 'swill', 'of', 'civil', 'war', 'and', 'segregation,', 'and', 'emerged', 'from', 'that', 'dark', 'chapter', 'stronger', 'and', 'more', 'united,', 'we', 'cannot', 'help', 'but', 'believe', 'that', 'that', 'company', 'pass', 'that', 'the', 'old', 'hatreds', 'shall', 'someday', 'pass;', 'that', 'the', 'line s', 'of', 'tribe', 'shall', 'soon', 'dissolve;', 'that', 'as', 'the', 'wor

ld', 'grows', 'smaller,', 'our', 'common', 'humanity', 'shall', 'reveal', 'itself;', 'and', 'that', 'america', 'must', 'play', 'its', 'role', 'in', 'ushering', 'in', 'a', 'new', 'era', 'of', 'peace.', 'to', 'the', 'musli m', 'world,', 'we', 'seek', 'a', 'new', 'way', 'forward,', 'based', 'on', 'mutual', 'interest', 'and', 'mutual', 'respect.', 'to', 'those', 'leader s', 'around', 'the', 'globe', 'who', 'seek', 'to', 'sow', 'conflict,', 'o r', 'blame', 'their', "society's", 'ills', 'on', 'the', 'west', '--', 'kno w', 'that', 'your', 'people', 'will', 'judge', 'you', 'on', 'what', 'you',
'can', 'build,', 'not', 'what', 'you', 'destroy.', 'to', 'those', 'who',
'cling', 'to', 'power', 'through', 'corruption', 'and', 'deceit', 'and', 'the', 'silencing', 'of', 'dissent,', 'know', 'that', 'you', 'are', 'on', 'the', 'wrong', 'side', 'of', 'history;', 'but', 'that', 'we', 'will', 'ex tend', 'a', 'hand', 'if', 'you', 'are', 'willing', 'to', 'unclench', 'you r', 'fist.', 'to', 'the', 'people', 'of', 'poor', 'nations,', 'we', 'pledg e', 'to', 'work', 'alongside', 'you', 'to', 'make', 'your', 'farms', 'flou rish', 'and', 'let', 'clean', 'waters', 'flow;', 'to', 'nourish', 'starve d', 'bodies', 'and', 'feed', 'hungry', 'minds.', 'and', 'to', 'those', 'na tions', 'like', 'ours', 'that', 'enjoy', 'relative', 'plenty,', 'we', 'sa y', 'we', 'can', 'no', 'longer', 'afford', 'indifference', 'to', 'the', 's uffering', 'outside', 'our', 'borders;', 'nor', 'can', 'we', 'consume', 't he', "world's", 'resources', 'without', 'regard', 'to', 'effect.', 'for', 'the', 'world', 'has', 'changed,', 'and', 'we', 'must', 'change', 'with', 'it.', 'as', 'we', 'consider', 'the', 'road', 'that', 'unfolds', 'before', 'us,', 'we', 'remember', 'with', 'humble', 'gratitude', 'those', 'brave', 'americans', 'who,', 'at', 'this', 'very', 'hour,', 'patrol', 'far-off', 'deserts', 'and', 'distant', 'mountains.', 'they', 'have', 'something', 'to', 'tell', 'us,', 'just', 'as', 'the', 'fallen', 'heroes', 'who', 'lie', 'in', 'arlington', 'whisper', 'through', 'the', 'ages.', 'we', 'honor', 'them', 'not', 'only', 'because', 'they', 'are', 'the', 'guardians', 'of', 'our', 'liberty,', 'but', 'because', 'they', 'embody', 'the', 'spirit', 'of', 'service:', 'a', 'willingness', 'to', 'find', 'meaning', 'in', 'someth f', 'service;', 'a', 'willingness', 'to', 'find', 'meaning', 'in', 'someth ing', 'greater', 'than', 'themselves.', 'and', 'yet,', 'at', 'this', 'mome
nt', '--', 'a', 'moment', 'that', 'will', 'define', 'a', 'generation', '--', 'it', 'is', 'precisely', 'this', 'spirit', 'that', 'must', 'inhabit', 'us', 'all.', 'for', 'as', 'much', 'as', 'government', 'can', 'do', 'and', 'must', 'do,', 'it', 'is', 'ultimately', 'the', 'faith', 'and', 'determina tion', 'of', 'the', 'american', 'people', 'upon', 'which', 'this', 'natio n', 'relies.', 'it', 'is', 'the', 'kindness', 'to', 'take', 'in', 'a', 'st
ranger', 'when', 'the', 'levees', 'break,', 'the', 'selflessness', 'of', 'workers', 'who', 'would', 'rather', 'cut', 'their', 'hours', 'than', 'se e', 'a', 'friend', 'lose', 'their', 'job', 'which', 'sees', 'us', 'throug h', 'our', 'darkest', 'hours.', 'it', 'is', 'the', "firefighter's", 'coura ge', 'to', 'storm', 'a', 'stairway', 'filled', 'with', 'smoke,', 'but', 'a lso', 'a', "parent's", 'willingness', 'to', 'nurture', 'a', 'child,', 'tha t', 'finally', 'decides', 'our', 'fate.', 'our', 'challenges', 'may', 'be', 'new.', 'the', 'instruments', 'with', 'which', 'we', 'meet', 'them', 'may', 'be', 'new.', 'but', 'those', 'values', 'upon', 'which', 'our', 'su ccess', 'depends', '--', 'honesty', 'and', 'hard', 'work,', 'courage', 'an d', 'fair', 'play,', 'tolerance', 'and', 'curiosity,', 'loyalty', 'and', 'patriotism', '--', 'these', 'things', 'are', 'old.', 'these', 'things', 'are', 'true.', 'they', 'have', 'been', 'the', 'quiet', 'force', 'of', 'pr ogress', 'throughout', 'our', 'history.', 'what', 'is', 'demanded', 'the n', 'is', 'a', 'return', 'to', 'these', 'truths.', 'what', 'is', 'require d', 'of', 'us', 'now', 'is', 'a', 'new', 'era', 'of', 'responsibility', '--', 'a', 'recognition,', 'on', 'the', 'part', 'of', 'every', 'american,', 'that', 'we', 'have', 'duties', 'to', 'ourselves,', 'our', 'nation,', 'an d', 'the', 'world,', 'duties', 'that', 'we', 'do', 'not', 'grudgingly', 'a ccept', 'but', 'rather', 'seize', 'gladly,', 'firm', 'in', 'the', 'knowled ge', 'that', 'there', 'is', 'nothing', 'so', 'satisfying', 'to', 'the', 's pirit', 'so', 'defining', 'of', 'our', 'character', 'than', 'giving', 'o pirit,', 'so', 'defining', 'of', 'our', 'character,', 'than', 'giving', 'o ur', 'all', 'to', 'a', 'difficult', 'task.', 'this', 'is', 'the', 'price',

'and', 'the', 'promise', 'of', 'citizenship.', 'this', 'is', 'the', 'sourc e', 'of', 'our', 'confidence', '--', 'the', 'knowledge', 'that', 'god', 'c alls', 'on', 'us', 'to', 'shape', 'an', 'uncertain', 'destiny.', 'this', 'is', 'the', 'meaning', 'of', 'our', 'liberty', 'and', 'our', 'creed', '--', 'why', 'men', 'and', 'women', 'and', 'children', 'of', 'every', 'race', 'and', 'every', 'faith', 'can', 'join', 'in', 'celebration', 'across', 'th is', 'magnificent', 'mall,', 'and', 'why', 'a', 'man', 'whose', 'father', 'less', 'than', 'sixty', 'years', 'ago', 'might', 'not', 'have', 'been', 'served', 'at', 'a', 'local', 'restaurant', 'can', 'now', 'stand', 'befor e', 'you', 'to', 'take', 'a', 'most', 'sacred', 'oath.', 'so', 'let', 'u 'this', 'day', 'with', 'remembrance,', 'of', 'who', e', 'and', 'how', 'far', 'we', 'have', 'traveled.', 'in', 'the', 'year', 'of', "america's", 'birth,', 'in', 'the', 'coldest', 'of', 'months,', 'a', 'of', "america's", 'birth,', 'in', 'the', 'coldest', of', months, a, 'small', 'band', 'of', 'patriots', 'huddled', 'by', 'dying', 'campfires', 'on', 'the', 'shores', 'of', 'an', 'icy', 'river.', 'the', 'capital', 'wa s', 'abandoned.', 'the', 'enemy', 'was', 'advancing.', 'the', 'snow', 'wa s', 'stained', 'with', 'blood.', 'at', 'a', 'moment', 'when', 'the', 'outc ome', 'of', 'our', 'revolution', 'was', 'most', 'in', 'doubt,', 'the', 'father', 'of', 'our', 'nation', 'ordered', 'these', 'words', 'be', 'read', 'the', 'future' 'to', 'the', 'people:', '"let', 'it', 'be', 'told', 'to', 'the', 'future', 'world', '...', 'that', 'in', 'the', 'depth', 'of', 'winter,', 'when', 'no thing', 'but', 'hope', 'and', 'virtue', 'could', 'survive', '...', 'that', 'the', 'city', 'and', 'the', 'country,', 'alarmed', 'at', 'one', 'common', 'danger,', 'came', 'forth', 'to', 'meet', '...', 'it."', 'america!', 'in', 'the', 'face', 'of', 'our', 'common', 'dangers,', 'in', 'this', 'winter', 'of', 'our', 'hardship,', 'let', 'us', 'remember', 'these', 'timeless', 'w ords.', 'with', 'hope', 'and', 'virtue,', 'let', 'us', 'brave', 'once', 'm ore', 'the', 'icy', 'currents,', 'and', 'endure', 'what', 'storms', 'may', 'come.', 'let', 'it', 'be', 'said', 'by', 'our', "children's", 'children', 'that', 'when', 'we', 'tested', 'we', 'refused', 'to', 'let', 'thi s', 'journey', 'end,', 'that', 'we', 'did', 'not', 'turn', 'back', 'nor', 'did', 'we', 'falter;', 'and', 'with', 'eyes', 'fixed', 'on', 'the', 'hori zon', 'and', "god's", 'grace', 'upon', 'us,', 'we', 'carried', 'forth', 't hat', 'great', 'gift', 'of', 'freedom', 'and', 'delivered', 'it', 'safel y', 'to', 'future', 'generations.', 'thank', 'you.', 'god', 'bless', 'yo u.', 'and', 'god', 'bless', 'the', 'united', 'states', 'of', 'america.']

#### In [93]:

In [94]:

Α

```
Out[94]:
['my',
 'fellow',
 'citizens',
 'i',
 'stand',
 'here',
 'today',
 'humbled',
 'by',
 'the',
 'task',
 'before',
 'us',
 'grateful',
 'for',
'the',
 'trust',
 'you',
 'have',
 'bestowed',
 'mindful',
 'of',
 'the',
 'sacrifices',
 'borne',
 'by',
 'our',
 'ancestors',
 'i',
 'thank',
 'president',
 'bush',
 'for',
 'his',
 'service',
 'to',
 'our',
 'nation',
 'as',
 'well',
 'as',
 'the',
 'generosity',
 'and',
 'cooperation',
 'he',
 'has',
 'shown',
 'throughout',
 'this',
 'transition',
 'fortyfour',
 'americans',
 'have',
 'now',
 'taken',
 'the',
 'presidential',
 'oath',
```

```
'the',
'words',
'have',
'been',
'spoken',
'during',
'rising',
'tides',
'of',
'prosperity',
'and',
'the',
'still',
'waters',
'of',
'peace',
'yet',
'every',
'so',
'often',
'the',
'oath',
'is',
'taken',
'amidst',
'gathering',
'clouds',
'and',
'raging',
'storms',
'at',
'these',
'moments',
'america',
'has',
'carried',
'on',
'not',
'simply',
'because',
'of',
'the',
'skill',
'or',
'vision',
'of',
'those',
'in',
'high',
'office',
'but',
'because',
'we',
'the',
'people',
'have',
'remained',
'faithful',
'to',
'the',
'ideals',
```

```
'of',
'our',
'forbearers',
'and',
'true',
'to',
'our',
'founding',
'documents',
'so',
'it',
'has',
'been',
'so',
'it',
'must',
'be',
'with',
'this',
'generation',
'of',
'americans',
'that',
'we',
'are',
'in',
'the',
'midst',
'of',
'crisis',
'is',
'now',
'well',
'understood',
'our',
'nation',
'is',
'at',
'war',
'against',
'a',
'farreaching',
'network',
'of',
'violence',
'and',
'hatred',
'our',
'economy',
'is',
'badly',
'weakened',
'a',
'consequence',
'of',
'greed',
'and',
'irresponsibility',
'on',
'the',
'part',
```

```
'of',
'some',
'but',
'also',
'our',
'collective',
'failure',
'to',
'make',
'hard',
'choices',
'and',
'prepare',
'the',
'nation',
'for',
'a',
'new',
'age',
'homes',
'have',
'been',
'lost',
'jobs',
'shed',
'businesses',
'shuttered',
'our',
'health',
'care',
'is',
'too',
'costly',
'our',
'schools',
'fail',
'too',
'many',
'and',
'each',
'day',
'brings',
'further',
'evidence',
'that',
'the',
'ways',
'we',
'use',
'energy',
'strengthen',
'our',
'adversaries',
'and',
'threaten',
'our',
'planet',
'these',
'are',
'the',
'indicators',
```

```
'of',
'crisis',
'subject',
'to',
'data',
'and',
'statistics',
'less',
'measurable',
'but',
'no',
'less',
'profound',
'is',
'a',
'sapping',
'of',
'confidence',
'across',
'our',
'land',
'a',
'nagging',
'fear',
'that',
'americas',
'decline',
'is',
'inevitable',
'that',
'the',
'next',
'generation',
'must',
'lower',
'its',
'sights',
'today',
'i',
'say',
'to',
'you',
'that',
'the',
'challenges',
'we',
'face',
'are',
'real',
'they',
'are',
'serious',
'and',
'they',
'are',
'many',
'they',
'will',
'not',
'be',
'met',
```

```
'easily',
'or',
'in',
'a',
'short',
'span',
'of',
'time',
'but',
'know',
'this',
'america',
'they',
'will',
'be',
'met',
'on',
'this',
'day',
'we',
'gather',
'because',
'we',
'have',
'chosen',
'hope',
'over',
'fear',
'unity',
'of',
'purpose',
'over',
'conflict',
'and',
'discord',
'on',
'this',
'day',
'we',
'come',
'to',
'proclaim',
'an',
'end',
'to',
'the',
'petty',
'grievances',
'and',
'false',
'promises',
'the',
'recriminations',
'and',
'wornout',
'dogmas',
'that',
'for',
'far',
'too',
'long',
```

```
'have',
'strangled',
'our',
'politics',
'we',
'remain',
'a',
'young',
'nation',
'but',
'in',
'the',
'words',
'of',
'scripture',
'the',
'time',
'has',
'come',
'to',
'set',
'aside',
'childish',
'things',
'the',
'time',
'has',
'come',
'to',
'reaffirm',
'our',
'enduring',
'spirit',
'to',
'choose',
'our',
'better',
'history',
'to',
'carry',
'forward',
'that',
'precious',
'gift',
'that',
'noble',
'idea',
'passed',
'on',
'from',
'generation',
'to',
'generation',
'the',
'godgiven',
'promise',
'that',
'all',
'are',
'equal',
'all',
```

```
'are',
'free',
'and',
'all',
'deserve',
'a',
'chance',
'to',
'pursue',
'their',
'full',
'measure',
'of',
'happiness',
'in',
'reaffirming',
'the',
'greatness',
'of',
'our',
'nation',
'we',
'understand',
'that',
'greatness',
'is',
'never',
'a',
'given',
'it',
'must',
'be',
'earned',
'our',
'journey',
'has',
'never',
'been',
'one',
'of',
'shortcuts',
'or',
'settling',
'for',
'less',
'it',
'has',
'not',
'been',
'the',
'path',
'for',
'the',
'fainthearted',
'for',
'those',
'who',
'prefer',
'leisure',
'over',
'work',
```

```
'or',
'seek',
'only',
'the',
'pleasures',
'of',
'riches',
'and',
'fame',
'rather',
'it',
'has',
'been',
'the',
'risktakers',
'the',
'doers',
'the',
'makers',
'of',
'thingssome',
'celebrated',
'but',
'more',
'often',
'men',
'and',
'women',
'obscure',
'in',
'their',
'labor',
'who',
'have',
'carried',
'us',
'up',
'the',
'long',
'rugged',
'path',
'towards',
'prosperity',
'and',
'freedom',
'for',
'us',
'they',
'packed',
'up',
'their',
'few',
'worldly',
'possessions',
'and',
'traveled',
'across',
'oceans',
'in',
'search',
'of',
```

```
'a',
'new',
'life',
'for',
'us',
'they',
'toiled',
'in',
'sweatshops',
'and',
'settled',
'the',
'west',
'endured',
'the',
'lash',
'of',
'the',
'whip',
'and',
'plowed',
'the',
'hard',
'earth',
'for',
'us',
'they',
'fought',
'and<sup>'</sup>,
'died',
'in',
'places',
'like',
'concord',
'and',
'gettysburg',
'normandy',
'and',
'khe',
'sahn',
'time',
'and',
'again',
'these',
'men',
'and',
'women',
'struggled',
'and',
'sacrificed',
'and',
'worked',
'till',
'their',
'hands',
'were',
'raw',
'so',
'that',
'we',
'might',
```

```
'live',
'a',
'better',
'life',
'they',
'saw',
'america',
'as',
'bigger',
'than',
'the',
'sum',
'of',
'our',
'individual',
'ambitions',
'greater',
'than',
'all',
'the',
'differences',
'of',
'birth',
'or',
'wealth',
'or',
'faction',
'this',
'is',
'the',
'journey',
'we',
'continue',
'today',
'we',
'remain',
'the',
'most',
'prosperous',
'powerful',
'nation',
'on',
'earth',
'our',
'workers',
'are',
'no',
'less',
'productive',
'than',
'when',
'this',
'crisis',
'began',
'our',
'minds',
'are',
'no',
'less',
'inventive',
'our',
```

```
'goods',
'and',
'services',
'no',
'less',
'needed',
'than',
'they',
'were',
'last',
'week',
'or',
'last',
'month',
'or',
'last',
'year',
'our',
'capacity',
'remains',
'undiminished',
'but',
'our',
'time',
'of',
'standing',
'pat',
'of',
'protecting',
'narrow',
'interests',
'and',
'putting',
'off',
'unpleasant',
'decisions',
'that',
'time',
'has',
'surely',
'passed',
'starting',
'today',
'we',
'must',
'pick',
'ourselves',
'up',
'dust',
'ourselves',
'off',
'and',
'begin',
'again',
'the',
'work',
'of',
'remaking',
'america',
'for',
'everywhere',
```

```
'we',
'look',
'there',
'is',
'work',
'to',
'be',
'done',
'the',
'state',
'of',
'our',
'economy',
'calls',
'for',
'action',
'bold',
'and',
'swift',
'and',
'we',
'will',
'act',
'not',
'only',
'to',
'create',
'new',
'jobs',
'but',
'to',
'lay',
'a',
'new',
'foundation',
'for',
'growth',
'we',
'will',
'build',
'the',
'roads',
'and',
'bridges',
'the',
'electric',
'grids',
'and',
'digital',
'lines',
'that',
'feed',
'our',
'commerce',
'and',
'bind',
'us',
'together',
'we',
'will',
'restore',
```

```
'science',
'to',
'its',
'rightful',
'place',
'and',
'wield',
'technologys',
'wonders',
'to',
'raise',
'health',
'cares',
'quality',
'and',
'lower',
'its',
'cost',
'we',
'will',
'harness',
'the',
'sun',
'and',
'the',
'winds',
'and',
'the',
'soil',
'to',
'fuel',
'our',
'cars',
'and',
'run',
'our',
'factories',
'and',
'we',
'will',
'transform',
'our',
'schools',
'and',
'colleges',
'and',
'universities',
'to',
'meet',
'the',
'demands',
'of',
'a',
'new',
'age',
'all',
'this',
'we',
'can',
'do',
'all',
```

```
'this',
'we',
'will',
'do',
'now',
'there',
'are',
'some',
'who',
'question',
'the',
'scale',
'of',
'our',
'ambitions',
'who',
'suggest',
'that',
'our',
'system',
'cannot',
'tolerate',
'too',
'many',
'big',
'plans',
'their',
'memories',
'are',
'short',
'for',
'they',
'have',
'forgotten',
'what',
'this',
'country',
'has',
'already',
'done',
'what',
'free',
'men',
'and',
'women',
'can',
'achieve',
'when',
'imagination',
'is',
'joined',
'to',
'common',
'purpose',
'and',
'necessity',
'to',
'courage',
'what',
'the',
'cynics',
```

```
'fail',
'to',
'understand',
'is',
'that',
'the',
'ground',
'has',
'shifted',
'beneath',
'them',
'that',
'the',
'stale',
'political',
'arguments',
'that',
'have',
'consumed',
'us',
'for',
'so',
'long',
'no',
'longer',
'apply',
'the',
'question',
'we',
'ask',
'today',
'is',
'not',
'whether',
'our',
'government',
'is',
'too',
'big',
'or',
'too',
'small',
'but',
'whether',
'it',
'works',
'whether',
'it',
'helps',
'families',
'find',
'jobs',
'at',
'a',
'decent',
'wage',
'care',
'they',
'can',
'afford',
'a',
```

```
'retirement',
'that',
'is',
'dignified',
'where',
'the',
'answer',
'is',
'yes',
'we',
'intend',
'to',
'move',
'forward',
'where',
'the',
'answer',
'is',
'no',
'programs',
'will',
'end',
'and',
'those',
'of',
'us',
...]
```

9/21/2018

-		
In	1961	•
TU	וטכו	

wordfreq

```
Out[96]:
{'a': 47,
 'abandoned': 1,
 'ability': 1,
 'accept': 1,
 'account': 1,
 'achieve': 1,
 'across': 3,
 'act': 1,
 'action': 1,
 'advance': 1,
 'advancing': 1,
 'adversaries': 1,
 'afford': 2,
 'afghanistan': 1,
 'again': 2,
 'against': 1,
 'age': 2,
 'ages': 1,
 'ago': 1,
 'aims': 1,
 'alarmed': 1,
 'all': 9,
 'alliances': 1,
 'alone': 1,
 'alongside': 1,
 'already': 1,
 'also': 2,
 'always': 1,
 'ambitions': 2,
 'america': 8,
 'american': 2,
 'americans': 3,
 'americas': 2,
 'amidst': 1,
 'an': 3,
 'ancestors': 1,
 'and': 111,
 'answer': 2,
 'apologize': 1,
 'apply': 1,
 'are': 22,
 'arguments': 1,
 'arlington': 1,
 'around': 1,
 'as': 11,
 'aside': 1,
 'ask': 1,
 'assure': 1,
 'at': 8,
 'back': 2,
 'bad': 1,
 'badly': 1,
 'band': 1,
 'based': 1,
 'be': 12,
 'because': 8,
 'been': 8,
 'before': 4,
 'began': 1,
```

'begin': 2, 'believe': 1, 'beneath': 1, 'bestowed': 1, 'better': 2, 'between': 3, 'big': 2, 'bigger': 1, 'bind': 1, 'birth': 2, 'bitter': 1, 'blame': 1, 'bless': 2, 'blood': 2, 'bodies': 1, 'bold': 1, 'borders': 1, 'born': 1, 'borne': 1, 'brave': 2, 'break': 1, 'bridges': 1, 'brings': 1, 'broken': 1, 'build': 2, 'bush': 1, 'business': 1, 'businesses': 1, 'but': 20, 'by': 8, 'calls': 2, 'came': 1, 'campfires': 1, 'can': 13, 'cannot': 6, 'capacity': 1, 'capital': 1, 'capitals': 1, 'care': 2, 'cares': 1, 'carried': 3, 'carry': 1, 'cars': 1, 'cause': 1, 'celebrated': 1, 'celebration': 1, 'challenges': 2, 'chance': 1, 'change': 1, 'changed': 1, 'chapter': 1, 'character': 1, 'charity': 1, 'charter': 2, 'child': 2, 'childish': 1, 'children': 2, 'childrens': 1, 'choice': 1, 'choices': 1, 'choose': 1,

```
'chosen': 1,
'christians': 1,
'citizens': 1,
'citizenship': 1,
'city': 1,
'civil': 1,
'clean': 1,
'cling': 1,
'clouds': 1,
'coldest': 1,
'collective': 1,
'colleges': 1,
'come': 4,
'commerce': 1,
'common': 6,
'communism': 1,
'concord': 1,
'confidence': 2,
'conflict': 2,
'consequence': 1,
'consider': 1,
'consume': 1,
'consumed': 1,
'continue': 1,
'control': 1,
'convictions': 1,
'cooperation': 2,
'corruption': 1,
'cost': 1,
'costly': 1,
'could': 1,
'country': 2,
'courage': 3,
'create': 1,
'creed': 1,
'crisis': 4,
'culture': 1,
'curiosity': 1,
'currents': 1,
'cut': 1,
'cynics': 1,
'danger': 1,
'dangers': 1,
'dark': 1,
'darkest': 1,
'data': 1,
'day': 5,
'deceit': 1,
'decent': 1,
'decides': 1,
'decisions': 1,
'decline': 1,
'defeat': 1,
'defense': 2,
'define': 1,
'defining': 1,
'delivered': 1,
'demand': 1,
'demanded': 1,
'demands': 1,
'depended': 1,
```

```
'depends': 1,
'depth': 1,
'deserts': 1,
'deserve': 1,
'destiny': 1,
'destroy': 1,
'determination': 1,
'did': 2,
'died': 1,
'differences': 1,
'difficult': 1,
'digital': 1,
'dignified': 1,
'dignity': 1,
'discord': 1,
'dissent': 1,
'dissolve': 1,
'distant': 1,
'do': 7,
'documents': 1,
'doers': 1,
'does': 1,
'dogmas': 1,
'dollars': 1,
'domestic': 1,
'done': 2,
'doubt': 1,
'down': 1,
'drafted': 1,
'drawn': 1,
'during': 1,
'dust': 1,
'duties': 2,
'dying': 1,
'each': 2,
'earlier': 1,
'earned': 1,
'earth': 3,
'easily': 1,
'economy': 3,
'effect': 1,
'effort': 1,
'electric': 1,
'emanates': 1,
'embody': 1,
'emerged': 1,
'end': 4,
'endure': 1,
'endured': 1,
'enduring': 2,
'enemy': 1,
'energy': 1,
'enjoy': 1,
'entitle': 1,
'equal': 1,
'era': 2,
'even': 2,
'every': 8,
'everywhere': 1,
'evidence': 1,
'example': 1,
```

```
'expand': 1,
'expanded': 1,
'expediences': 1,
'extend': 2,
'eye': 1,
'eyes': 1,
'face': 2,
'faced': 2,
'faction': 1,
'factories': 1,
'fail': 2,
'failure': 1,
'fainthearted': 1,
'fair': 1,
'faith': 2,
'faithful': 1,
'fallen': 1,
'false': 2,
'falter': 1,
'fame': 1,
'families': 1,
'far': 2,
'farms': 1,
'faroff': 1,
'farreaching': 1,
'fascism': 1,
'fate': 1,
'father': 3,
'fathers': 1,
'favors': 1,
'fear': 2,
'feed': 2,
'fellow': 1,
'few': 1,
'filled': 1,
'finally': 1,
'find': 2,
'firefighters': 1,
'firm': 1,
'fist': 1,
'fixed': 1,
'flourish': 1,
'flow': 1,
'foes': 1,
'for': 23,
'forbearers': 1,
'force': 3,
'forge': 1,
'forgotten': 1,
'former': 1,
'forth': 2,
'fortyfour': 1,
'forward': 3,
'fought': 1,
'foundation': 1,
'founding': 2,
'free': 2,
'freedom': 3,
'friend': 2,
'friends': 1,
'from': 5,
```

```
'fuel': 1,
'full': 1,
'further': 1,
'future': 3,
'gather': 1,
'gathering': 1,
'generate': 1,
'generation': 5,
'generations': 3,
'generosity': 1,
'gettysburg': 1,
'gift': 2,
'give': 1,
'given': 1,
'giving': 1,
'gladly': 1,
'globe': 1,
'god': 3,
'godgiven': 1,
'gods': 1,
'good': 2,
'goods': 1,
'government': 3,
'governments': 1,
'grace': 1,
'grandest': 1,
'grateful': 1,
'gratitude': 1,
'great': 1,
'greater': 4,
'greatness': 2,
'greed': 1,
'grids': 1,
'grievances': 1,
'gross': 1,
'ground': 1,
'grows': 2,
'growth': 1,
'grudgingly': 1,
'guardians': 1,
'guided': 1,
'habits': 1,
'hand': 1,
'hands': 1,
'happiness': 1,
'hard': 3,
'hardearned': 1,
'hardship': 1,
'harness': 1,
'has': 14,
'hatred': 1,
'hatreds': 1,
'have': 16,
'he': 1,
'health': 2,
'heart': 1,
'held': 1,
'help': 1,
'helps': 1,
'here': 1,
'heritage': 1,
```

```
'heroes': 1,
'high': 1,
'hindus': 1,
'his': 1,
'history': 3,
'homes': 1,
'honesty': 1,
'honor': 1,
'hope': 3,
'horizon': 1,
'hour': 1,
'hours': 2,
'how': 1,
'huddled': 1,
'humanity': 1,
'humble': 1,
'humbled': 1,
'humility': 1,
'hungry': 1,
'i': 3,
'icy': 2,
'idea': 1,
'ideals': 3,
'if': 1,
'ill': 1,
'ills': 1,
'imagination': 1,
'imagine': 1,
'in': 25,
'indicators': 1,
'indifference': 1,
'individual': 1,
'inducing': 1,
'inevitable': 1,
'inhabit': 1,
'innocents': 1,
'instead': 1,
'instruments': 1,
'intend': 1,
'interest': 1,
'interests': 1,
'inventive': 1,
'iraq': 1,
'irresponsibility': 1,
'is': 36,
'it': 19,
'its': 8,
'itself': 1,
'jews': 1,
'job': 1,
'jobs': 3,
'join': 1,
'joined': 1,
'journey': 3,
'judge': 1,
'just': 3,
'justness': 1,
'keepers': 1,
'khe': 1,
'kindness': 1,
'knew': 1,
```

```
'know': 5,
'knowledge': 2,
'labor': 1,
'land': 1,
'language': 1,
'lash': 1,
'last': 3,
'law': 1,
'lay': 1,
'lead': 1,
'leaders': 1,
'leave': 1,
'legacy': 1,
'leisure': 1,
'less': 7,
'lessen': 1,
'let': 7,
'levees': 1,
'liberty': 2,
'lie': 1,
'life': 3,
'light': 2,
'like': 2,
'lines': 2,
'live': 1,
'local': 1,
'long': 4,
'longer': 2,
'look': 1,
'lose': 1,
'lost': 1,
'lower': 2,
'loyalty': 1,
'magnificent': 1,
'make': 2,
'makers': 1,
'mall': 1,
'man': 3,
'manage': 1,
'many': 3,
'mark': 1,
'market': 2,
'may': 3,
'meaning': 2,
'measurable': 1,
'measure': 1,
'meet': 4,
'memories': 1,
'men': 4,
'met': 2,
'midst': 1,
'might': 2,
'mindful': 1,
'minds': 2,
'missiles': 1,
'moment': 3,
'moments': 1,
'month': 1,
'months': 1,
'more': 5,
'most': 3,
```

```
'mountains': 1,
'move': 1,
'much': 1,
'muslim': 1,
'muslims': 1,
'must': 8,
'mutual': 2,
'my': 2,
'nagging': 1,
'narrow': 1,
'nation': 12,
'nations': 3,
'necessity': 1,
'needed': 1,
'network': 1,
'never': 2,
'new': 11,
'next': 1,
'no': 7,
'noble': 1,
'nonbelievers': 1,
'nor': 5,
'normandy': 1,
'not': 16,
'nothing': 2,
'nourish': 1,
'now': 6,
'nuclear': 1,
'nurture': 1,
'oath': 3,
'obscure': 1,
'oceans': 1,
'of': 82,
'off': 2,
'office': 1,
'often': 2,
'old': 3,
'on': 17,
'once': 3,
'one': 2,
'only': 5,
'opportunity': 1,
'or': 11,
'ordered': 1,
'other': 1,
'our': 67,
'ours': 1,
'ourselves': 3,
'out': 2,
'outcome': 1,
'outlast': 1,
'outside': 1,
'over': 3,
'packed': 1,
'parents': 1,
'part': 2,
'pass': 1,
'passed': 2,
'pat': 1,
'patchwork': 1,
'path': 2,
```

```
'patriotism': 1,
'patriots': 1,
'patrol': 1,
'peace': 4,
'people': 7,
'peoples': 1,
'perils': 1,
'petty': 1,
'pick': 1,
'place': 1,
'places': 1,
'planet': 2,
'plans': 1,
'play': 2,
'please': 1,
'pleasures': 1,
'pledge': 1,
'plenty': 1,
'plowed': 1,
'political': 1,
'politics': 1,
'poor': 1,
'possessions': 1,
'power': 4,
'powerful': 1,
'precious': 1,
'precisely': 1,
'prefer': 1,
'prepare': 1,
'president': 1,
'presidential': 1,
'price': 1,
'principles': 1,
'proclaim': 1,
'product': 1,
'productive': 1,
'profound': 1,
'programs': 1,
'progress': 1,
'promise': 2,
'promises': 1,
'prosper': 1,
'prosperity': 3,
'prosperous': 2,
'protect': 1,
'protecting': 1,
'prudent': 1,
'publics': 1,
'purpose': 2,
'pursue': 1,
'putting': 1,
'qualities': 1,
'quality': 1,
'question': 3,
'quiet': 1,
'race': 1,
'raging': 1,
'raise': 1,
'rather': 3,
'raw': 1,
'reach': 1,
```

```
'read': 1,
'ready': 1,
'reaffirm': 1,
'reaffirming': 1,
'real': 1,
'recall': 1,
'recognition': 1,
'recriminations': 1,
'reform': 1,
'refused': 1,
'regard': 1,
'reject': 1,
'relative': 1,
'relies': 1,
'remain': 2,
'remained': 1,
'remains': 1,
'remaking': 1,
'remember': 2,
'remembrance': 1,
'reminded': 1,
'required': 1,
'resources': 1,
'respect': 1,
'responsibility': 1,
'responsibly': 1,
'restaurant': 1,
'restore': 2,
'restraint': 1,
'retirement': 1,
'return': 1,
'reveal': 1,
'revolution': 1,
'riches': 1,
'rightful': 1,
'rights': 1,
'rising': 1,
'risktakers': 1,
'river': 1,
'road': 1,
'roads': 1,
'role': 1,
'roll': 1,
'route': 1,
'rugged': 1,
'rule': 1,
'run': 1,
'sacred': 1,
'sacrificed': 1,
'sacrifices': 1,
'safely': 1,
'safety': 1,
'sahn': 1,
'said': 1,
'sake': 1,
'sapping': 1,
'satisfying': 1,
'saw': 1,
'say': 3,
'scale': 1,
'scarcely': 1,
```

```
'schools': 2,
'science': 1,
'scripture': 1,
'search': 1,
'security': 1,
'see': 1,
'seek': 4,
'seeks': 1,
'sees': 1,
'segregation': 1,
'seize': 1,
'selflessness': 1,
'serious': 1,
'served': 1,
'service': 2,
'services': 1,
'set': 1,
'settled': 1,
'settling': 1,
'shall': 3,
'shape': 1,
'shaped': 1,
'shed': 1,
'shifted': 1,
'shores': 1,
'short': 2,
'shortcuts': 1,
'shown': 1,
'shuttered': 1,
'side': 1,
'sights': 1,
'silencing': 1,
'simply': 1,
'sixty': 1,
'size': 1,
'skill': 1,
'slaughtering': 1,
'small': 3,
'smaller': 1,
'smoke': 1,
'snow': 1,
'so': 9,
'societys': 1,
'soil': 1,
'some': 2,
'someday': 1,
'something': 2,
'soon': 1,
'source': 1,
'sow': 1,
'span': 1,
'specter': 1,
'spend': 1,
'spin': 1,
'spirit': 5,
'spoken': 1,
'stained': 1,
'stairway': 1,
'stale': 1,
'stand': 2,
'standing': 1,
```

```
'starting': 1,
'starved': 1,
'state': 1,
'states': 1,
'statistics': 1,
'still': 2,
'storm': 1,
'storms': 2,
'stranger': 1,
'strangled': 1,
'strength': 1,
'strengthen': 1,
'stronger': 2,
'struggled': 1,
'sturdy': 1,
'subject': 1,
'success': 2,
'suffering': 1,
'suggest': 1,
'sum': 1,
'sun': 1,
'surely': 1,
'surest': 1,
'survive': 1,
'sweatshops': 1,
'swift': 1,
'swill': 1,
'system': 1,
'take': 2,
'taken': 2,
'tanks': 1,
'task': 2,
'tasted': 1,
'technologys': 1,
'tell': 1,
'tempering': 1,
'terror': 1,
'tested': 1,
'than': 8,
'thank': 2,
'that': 49,
'the': 135,
'their': 10,
'them': 4,
'themselves': 1,
'then': 2,
'there': 3,
'these': 9,
'they': 17,
'things': 3,
'thingssome': 1,
'this': 24,
'those': 11,
'threat': 1,
'threaten': 1,
'threats': 1,
'through': 4,
'throughout': 2,
'tides': 1,
'till': 1,
'time': 6,
```

```
'timeless': 1,
'tirelessly': 1,
'to': 70,
'today': 6,
'together': 1,
'toiled': 1,
'told': 1,
'tolerance': 1,
'tolerate': 1,
'too': 6,
'towards': 1,
'transform': 1,
'transition': 1,
'traveled': 2,
'tribe': 1,
'true': 2,
'trust': 2,
'truths': 1,
'turn': 1,
'ultimately': 1,
'uncertain': 1,
'unclench': 1,
'understand': 2,
'understanding': 1,
'understood': 2,
'undiminished': 1,
'unfolds': 1,
'united': 2,
'unity': 1,
'universities': 1,
'unmatched': 1,
'unpleasant': 1,
'up': 4,
'upon': 3,
'us': 23,
'use': 2,
'ushering': 1,
'values': 1,
'very': 1,
'village': 1,
'violence': 1,
'virtue': 2,
'vision': 1,
'vital': 1,
'wage': 1,
'war': 2,
'warming': 1,
'was': 5,
'watchful': 1,
'watching': 1,
'waters': 2,
'waver': 1,
'way': 2,
'ways': 1,
'we': 62,
'weakened': 1,
'weakness': 1,
'wealth': 2,
'week': 1,
'well': 2,
'were': 3,
```

```
'west': 2,
 'what': 8,
 'when': 7,
 'where': 3,
 'whether': 4,
 'which': 4,
 'whip': 1,
 'whisper': 1,
 'who': 14,
 'whose': 1,
 'why': 2,
 'wield': 1,
 'will': 19,
 'willing': 2,
 'willingness': 2,
 'winds': 1,
 'winter': 2,
 'wisely': 1,
 'with': 13,
 'without': 2,
 'woman': 1,
 'women': 4,
 'wonders': 1,
 'words': 4,
 'work': 6,
 'worked': 1,
 'workers': 2,
 'works': 1,
 'world': 6,
 'worldly': 1,
 'worlds': 1,
 'wornout': 1,
 'would': 1,
 'wrong': 1,
 'year': 2,
 'years': 1,
 'yes': 1,
 'yet': 2,
 'you': 14,
 'young': 1,
 'your': 3}
In [95]:
wordfreq = {}
for i in A:
    if i not in wordfreq:
        wordfreq[i] = 0
    wordfreq[i] += 1
In [97]:
import matplotlib.pyplot as plt
In [98]:
```

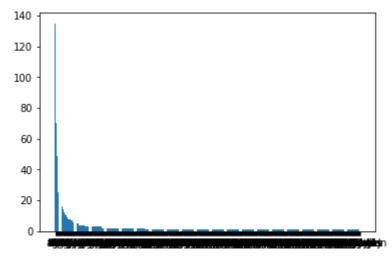
from collections import Counter

import matplotlib.pyplot as plt

import numpy as np

### In [99]:

```
counts = wordfreq
labels, values = zip(*counts.items())
indSort = np.argsort(values)[::-1]
labels = np.array(labels)[indSort]
values = np.array(values)[indSort]
indexes = np.arange(len(labels))
bar_width = 0.35
plt.bar(indexes, values)
plt.xticks(indexes + bar_width, labels)
plt.show()
```



## In [102]:

```
from os import path
from wordcloud import WordCloud
```

#### In [105]:

### In [106]:

```
plt.figure(figsize = (8, 8), facecolor = None)
plt.imshow(wordcloud)
plt.axis("off")
plt.tight_layout(pad = 0)
plt.show()
```

