

In [1]:

```
!pip install wordcloud
!pip install fileupload
!pip install ipywidgets
!jupyter nbextension install --py --user fileupload
!jupyter nbextension enable --py fileupload

import wordcloud
import numpy as np
from matplotlib import pyplot as plt
from IPython.display import display
import fileupload
import io
import sys
```

Requirement already satisfied: wordcloud in c:\users\hp\anaconda3\lib\site-packages (1.8.1)

Requirement already satisfied: pillow in c:\users\hp\anaconda3\lib\site-packages (from wordcloud) (7.2.0)

Requirement already satisfied: numpy>=1.6.1 in c:\users\hp\anaconda3\lib\site-packages (from wordcloud) (1.18.5)

Requirement already satisfied: matplotlib in c:\users\hp\anaconda3\lib\site-packages (from wordcloud) (3.2.2)

Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib->wordcloud) (1.2.0)

Requirement already satisfied: cycler>=0.10 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib->wordcloud) (0.10.0)

Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib->wordcloud) (2.4.7)

Requirement already satisfied: python-dateutil>=2.1 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib->wordcloud) (2.8.1)

Requirement already satisfied: six in c:\users\hp\anaconda3\lib\site-packages (from cycler>=0.10->matplotlib->wordcloud) (1.15.0)

Requirement already satisfied: fileupload in c:\users\hp\anaconda3\lib\site-packages (0.1.5)

Requirement already satisfied: notebook>=4.2 in c:\users\hp\anaconda3\lib\site-packages (from fileupload) (6.0.3)

Requirement already satisfied: traitlets>=4.2 in c:\users\hp\anaconda3\lib\site-packages (from fileupload) (4.3.3)

Requirement already satisfied: ipywidgets>=5.1 in c:\users\hp\anaconda3\lib\site-packages (from fileupload) (7.5.1)

Requirement already satisfied: jupyter-core>=4.6.1 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (4.6.3)

Requirement already satisfied: ipykernel in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (5.3.2)

Requirement already satisfied: jinja2 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (2.11.2)

Requirement already satisfied: pyzmq>=17 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (19.0.1)

Requirement already satisfied: terminado>=0.8.1 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (0.8.3)

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Requirement already satisfied: nbconvert in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (5.6.1)

Requirement already satisfied: prometheus-client in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (0.8.0)

Requirement already satisfied: ipython-genutils in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (0.2.0)

Requirement already satisfied: tornado>=5.0 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (6.0.4)

Requirement already satisfied: Send2Trash in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (1.5.0)

Requirement already satisfied: nbformat in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.2->fileupload) (5.0.7)

Requirement already satisfied: decorator in c:\users\hp\anaconda3\lib\site-packages (from traitlets>=4.2->fileupload) (4.4.2)

Requirement already satisfied: six in c:\users\hp\anaconda3\lib\site-packages (from traitlets>=4.2->fileupload) (1.15.0)

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Requirement already satisfied: pywin32>=1.0; sys\_platform == "win32" in

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Requirement already satisfied: MarkupSafe>=0.23 in c:\users\hp\anaconda3\lib\site-packages (from jinja2->notebook>=4.2->fileupload) (1.1.1)
Requirement already satisfied: python-dateutil>=2.1 in c:\users\hp\anaconda3\lib\site-packages (from jupyter-client>=5.3.4->notebook>=4.2->fileupload) (2.8.1)
Requirement already satisfied: pandocfilters>=1.4.1 in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.2->fileupload) (1.4.2)
Requirement already satisfied: testpath in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.2->fileupload) (0.4.4)
Requirement already satisfied: entrypoints>=0.2.2 in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.2->fileupload) (0.3)
Requirement already satisfied: mistune<2,>=0.8.1 in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.2->fileupload) (0.8.4)
Requirement already satisfied: bleach in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.2->fileupload) (3.1.5)
Requirement already satisfied: defusedxml in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.2->fileupload) (0.6.0)
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Requirement already satisfied: packaging in c:\users\hp\anaconda3\lib\site-packages (from bleach->nbconvert->notebook>=4.2->fileupload) (20.4)
Requirement already satisfied: webencodings in c:\users\hp\anaconda3\lib\site-packages (from bleach->nbconvert->notebook>=4.2->fileupload) (0.5.1)
Requirement already satisfied: pyparsing>=2.0.14.0 in c:\users\hp\anaconda3\lib\site-packages (from jsonschema!=2.5.0,>=2.4->nbformat->notebook>=4.2->fileupload) (0.16.0)
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Requirement already satisfied: traitlets>=4.3.1 in c:\users\hp\anaconda3\lib\site-packages (from ipywidgets) (4.3.3)

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Requirement already satisfied: widgetsnbextension~=3.5.0 in c:\users\hp\anaconda3\lib\site-packages (from ipywidgets) (3.5.1)

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Requirement already satisfied: jupyter-client in c:\users\hp\anaconda3\lib\site-packages (from ipykernel>=4.5.1->ipywidgets) (6.1.6)

Requirement already satisfied: tornado>=4.2 in c:\users\hp\anaconda3\lib\site-packages (from ipykernel>=4.5.1->ipywidgets) (6.0.4)

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Requirement already satisfied: pygments in c:\users\hp\anaconda3\lib\site-packages (from ipython>=4.0.0; python\_version >= "3.3"->ipywidgets) (2.6.1)

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Requirement already satisfied: pyzmq>=13 in c:\users\hp\anaconda3\lib\site-packages (from jupyter-client->ipykernel>=4.5.1->ipywidgets) (19.0.1)

Requirement already satisfied: python-dateutil>=2.1 in c:\users\hp\anaconda3\lib\site-packages (from jupyter-client->ipykernel>=4.5.1->ipywidgets) (2.8.1)

Requirement already satisfied: pywin32>=1.0; sys\_platform == "win32" in c:\users\hp\anaconda3\lib\site-packages (from jupyter-core->nbformat>=4.2.0->ipywidgets) (227)

Requirement already satisfied: pyparsing>=0.14.0 in c:\users\hp\anaconda3\lib\site-packages (from jsonschema!=2.5.0,>=2.4->nbformat>=4.2.0->ipywidgets) (0.16.0)

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(19.3.0)

Requirement already satisfied: jinja2 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (2.11.2)

Requirement already satisfied: terminado>=0.8.1 in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (0.8.3)

Requirement already satisfied: Send2Trash in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (1.5.0)

Requirement already satisfied: nbconvert in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (5.6.1)

Requirement already satisfied: prometheus-client in c:\users\hp\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (0.8.0)

Requirement already satisfied: wcwidth in c:\users\hp\anaconda3\lib\site-packages (from prompt-toolkit!=3.0.0,!<3.0.1,<3.1.0,>=2.0.0->ipython>=4.0.0; python\_version >= "3.3"->ipywidgets) (0.2.5)

Requirement already satisfied: parso<0.8.0,>=0.7.0 in c:\users\hp\anaconda3\lib\site-packages (from jedi>=0.10->ipython>=4.0.0; python\_version >= "3.3"->ipywidgets) (0.7.0)

Requirement already satisfied: MarkupSafe>=0.23 in c:\users\hp\anaconda3\lib\site-packages (from jinja2->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (1.1.1)

Requirement already satisfied: entrypoints>=0.2.2 in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (0.3)

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Requirement already satisfied: defusedxml in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (0.6.0)

Requirement already satisfied: pandocfilters>=1.4.1 in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (1.4.2)

Requirement already satisfied: bleach in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (3.1.5)

Requirement already satisfied: mistune<2,>=0.8.1 in c:\users\hp\anaconda3\lib\site-packages (from nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (0.8.4)

Requirement already satisfied: webencodings in c:\users\hp\anaconda3\lib\site-packages (from bleach->nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (0.5.1)

Requirement already satisfied: packaging in c:\users\hp\anaconda3\lib\site-packages (from bleach->nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (20.4)

Requirement already satisfied: pyparsing>=2.0.2 in c:\users\hp\anaconda3\lib\site-packages (from packaging->bleach->nbconvert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets) (2.4.7)

```
Installing C:\Users\hp\anaconda3\lib\site-packages\fileupload\static -> fileupload
Up to date: C:\Users\hp\AppData\Roaming\jupyter\nbextensions\fileupload\extension.js
Up to date: C:\Users\hp\AppData\Roaming\jupyter\nbextensions\fileupload\widget.js
Up to date: C:\Users\hp\AppData\Roaming\jupyter\nbextensions\fileupload\fileupload\widget.js
- Validating: ok
```

To initialize this nbextension in the browser every time the notebook (or other app) loads:

```
jupyter nbextension enable fileupload --user --py
```

```
Enabling notebook extension fileupload/extension...
- Validating: ok
```

In [9]:

```
def _upload():

    _upload_widget = fileupload.FileUploadWidget()

    def _cb(change):
        global file_contents
        decoded = io.StringIO(change['owner'].data.decode('utf-8'))
        filename = change['owner'].filename
        print('Uploaded `{}` ({:.3f} kB)'.format(
            filename, len(decoded.read()) / 2 **10))
        file_contents = decoded.getvalue()

    _upload_widget.observe(_cb, names='data')
    display(_upload_widget)

_upload()
```

Uploaded `Ans 1.txt` (0.822 kB)

Uploaded `Ans 1.txt` (1.991 kB)

