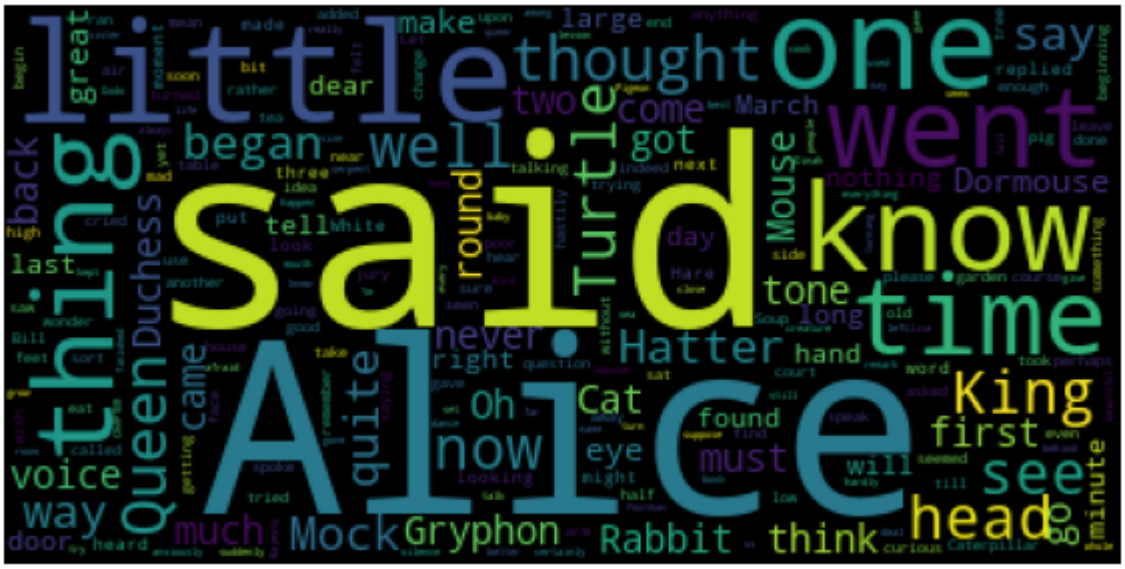
In [3]:
```
import matplotlib.pyplot as plt
import pandas as pd

from wordcloud import WordCloud,STOPWORDS

alice_novel = open("alice_in_wonderland.txt")
alice_novel = alice_novel.read()

stopwords = set(STOPWORDS)
print(stopwords)
stopwords.add('looked')
print(len(stopwords))

alice_wc = WordCloud(background_color = 'black',max_words=2000,stopwords=stopwords,c
# here, in the above line, stopwords = variable(stopwords)
alice_wc.generate(alice_novel)
```

```
{'are', 'themselves', 'his', "i'm", 'until', 'for', 'they', 'these', 'in', "it's", 'o
urselves', 'how', "wasn't", 'because', "aren't", 'again', 'can', 'it', 'ought', "we've
e", 'while', 'if', 'those', 'where', "you'd", 'both', "doesn't", "how's", 'k', 'him',
'under', 'he', 'ours', 'each', 'up', 'on', 'doing', "i'd", 'or', 'than', 'himself',
'am', "haven't", 'would', 'your', "when's", "you've", 'between', 'since', 'into', 'ou
t', 'about', 'few', 'does', 'an', 'most', 'same', 'me', "they'll", 'too', 'itself',
"mustn't", 'as', 'what', 'also', "don't", 'did', 'were', 'ever', 'had', 'her', "had
n't", 'at', 'above', 'else', 'r', 'you', 'nor', "she's", 'against', "he's", 'been',
'so', 'to', 'whom', 'shall', 'has', "shan't", "there's", "weren't", "let's", "should
n't", "why's", 'being', "isn't", 'yourself', "i've", 'by', "where's", 'could', "could
n't", 'therefore', 'further', "we're", 'here', 'just', "that's", 'we', 'herself', 'yo
urselves', 'hers', 'not', 'http', 'through', 'once', "won't", "he'll", "you'll", "i'l
l", 'yours', 'when', 'below', 'myself', 'this', "what's", 'theirs', "we'd", 'own', "t
hey'd", 'do', "she'd", 'is', 'www', 'was', 'otherwise', 'she', 'before', 'of', 'but',
"wouldn't", 'during', 'a', 'over', 'having', 'hence', 'some', 'however', "didn't", "s
he'll", 'only', 'my', 'from', 'which', 'them', "hasn't", 'no', 'i', "we'll", 'get',
'there', 'their', 'more', "can't", 'its', "they're", 'have', "who's", "you're", 'afte
r', 'our', 'why', 'cannot', 'should', 'like', 'such', "they've", 'with', 'who', 'of
f', 'any', 'down', "he'd", 'other', 'and', 'com', 'that', 'all', 'be', 'very', 'the
n', 'the', "here's"}
193
```

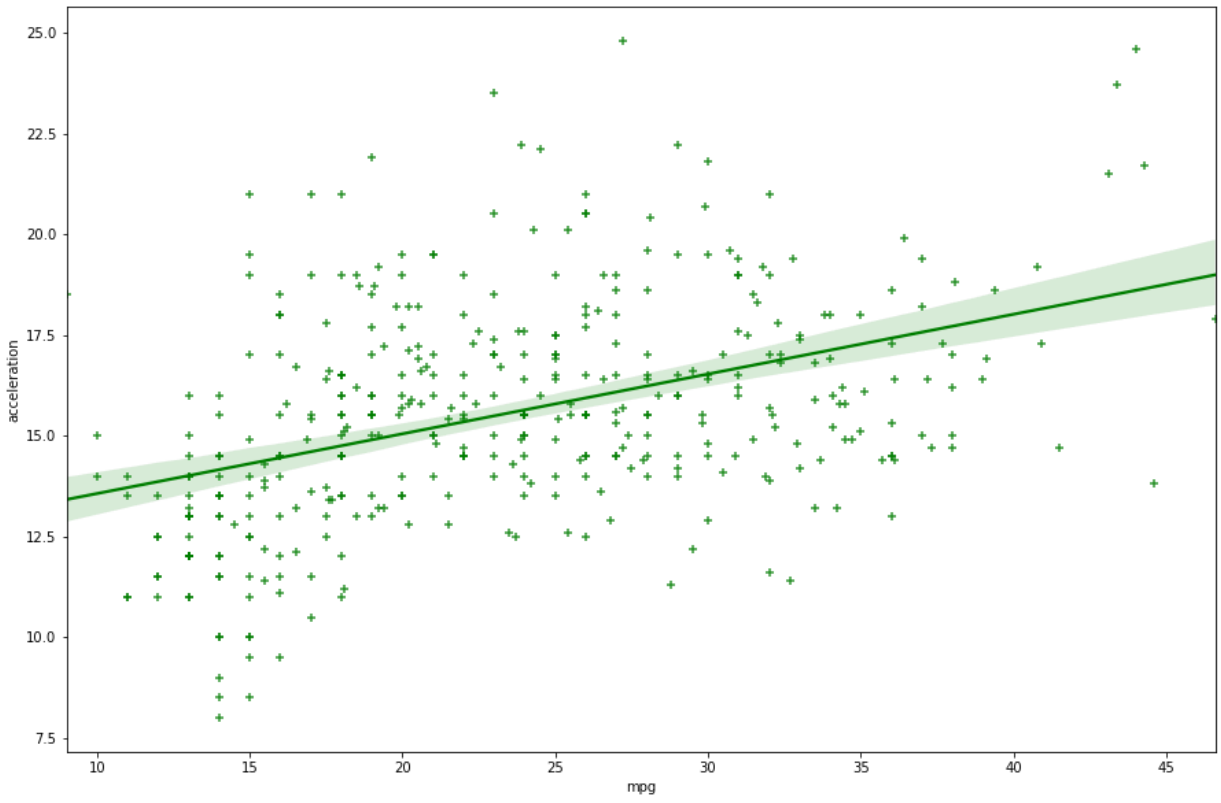
Out[3]:
```
<wordcloud.wordcloud.WordCloud at 0x2cf98d7c970>
```

In [4]:
```
import matplotlib.pyplot as plt

plt.figure(figsize=[10,10])
plt.imshow(alice_wc)
plt.axis('off')
plt.show()
```



In [8]:

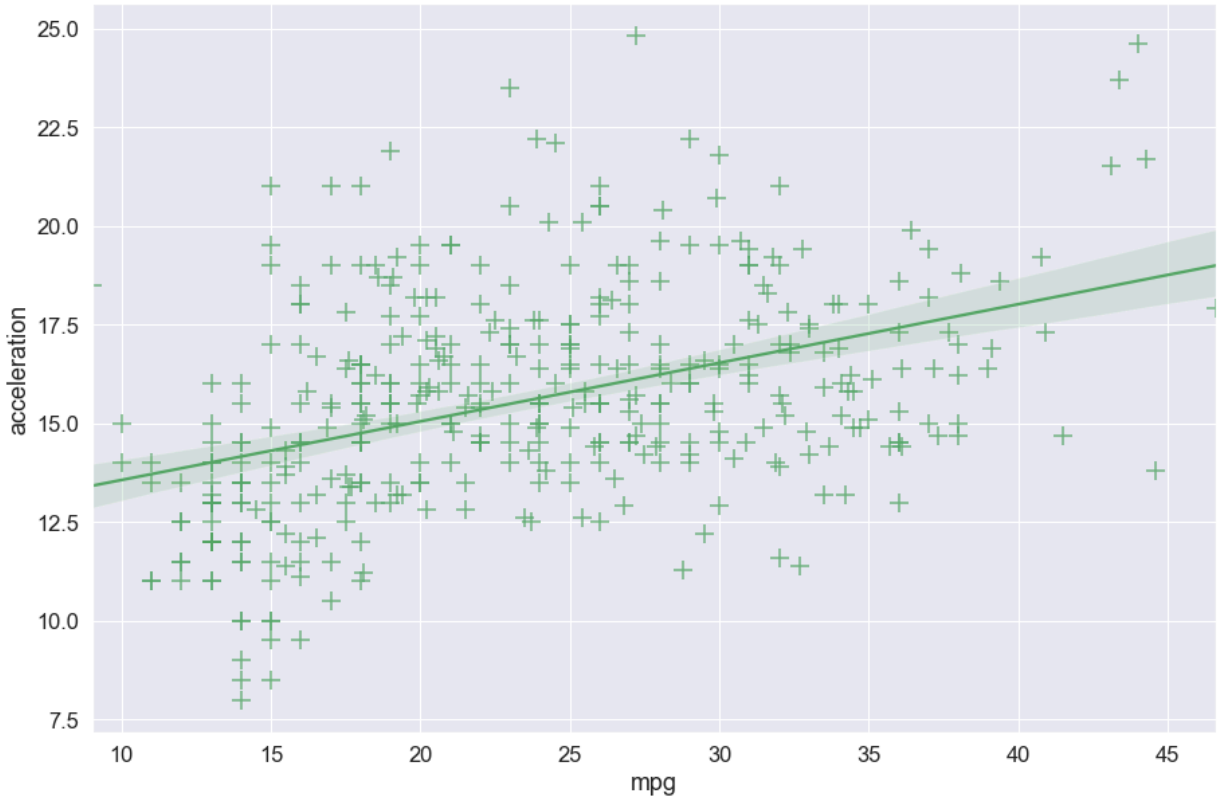
```
# REGRESSION PLOT

import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
plt.figure(figsize=(15,10))
dataset = pd.read_csv('auto-mpg.csv')
sns.regplot(x='mpg',y='acceleration',data=dataset,color = "g",marker="+")
plt.show()
```



In [12]:

```
# REGRESSION PLOT

import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd

plt.figure(figsize=(15,10))
sns.set(font_scale=1.5)
dataset = pd.read_csv('auto-mpg.csv')
```

```
sns.regplot(x='mpg',y='acceleration',data=dataset,color = "g",marker="+",scatter_kws
plt.show()
```



In [6]:
```
dataset.corr()
```

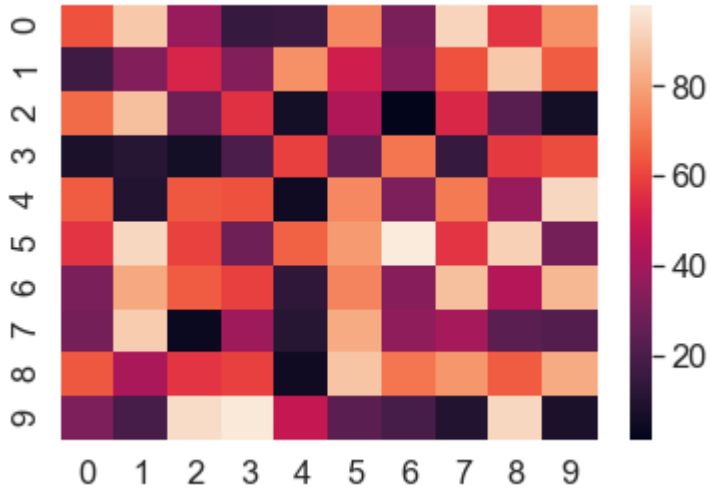
Out[6]:

	mpg	cylinders	displacement	weight	acceleration	model year	origin
mpg	1.000000	-0.775396	-0.804203	-0.831741	0.420289	0.579267	0.563450
cylinders	-0.775396	1.000000	0.950721	0.896017	-0.505419	-0.348746	-0.562543
displacement	-0.804203	0.950721	1.000000	0.932824	-0.543684	-0.370164	-0.609409
weight	-0.831741	0.896017	0.932824	1.000000	-0.417457	-0.306564	-0.581024
acceleration	0.420289	-0.505419	-0.543684	-0.417457	1.000000	0.288137	0.205873
model year	0.579267	-0.348746	-0.370164	-0.306564	0.288137	1.000000	0.180662
origin	0.563450	-0.562543	-0.609409	-0.581024	0.205873	0.180662	1.000000

In [14]:
```
# HEAT MAP

import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

data = np.random.randint(low = 1, high = 100, size = (10,10))

print("data to be plotted:\n")
print(data)
hm = sns.heatmap(data)
plt.show()
```

```
data to be plotted:

[[63 89 38 15 16 74 31 92 57 76]
 [17 33 53 33 76 51 34 63 89 65]
 [68 87 28 56  6 43  1 54 23  6]
 [ 8 11  6 20 59 26 70 15 58 62]
```

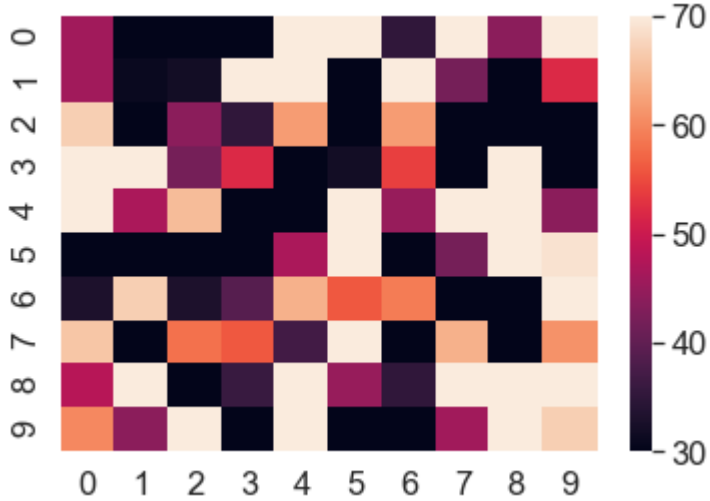
```
[65 10 64 63  5 74 32 71 38 93]
[57 93 60 28 66 78 98 57 91 30]
[31 81 65 59 13 73 34 87 44 85]
[30 90  4 39 11 82 36 41 24 22]
[64 42 57 59  5 88 70 77 65 82]
[32 19 94 97 48 24 19 10 93  8]]
```



In [15]:

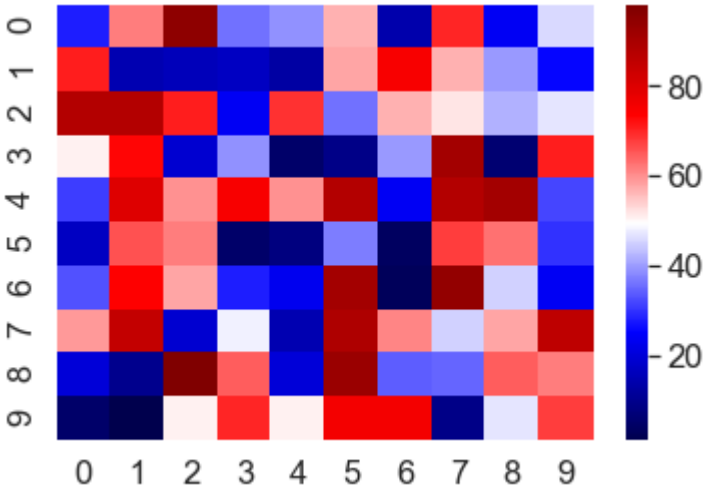
```python
# Anchoring the color map

import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

data = np.random.randint(low = 1, high = 100, size = (10,10))

print("data to be plotted:\n")
print(data)
hm = sns.heatmap(data,vmin=30,vmax=70)
plt.show()
```

```
data to be plotted:

[[46 17 10 29 79 74 35 76 44 70]
 [46 31 32 94 77  2 84 42 27 52]
 [67 19 44 35 62 16 62 17 20 20]
 [71 78 42 52 26 32 54  2 78 12]
 [78 47 65 26 24 82 45 83 79 44]
 [14 18  2 21 47 99 22 42 85 69]
 [33 67 33 39 64 56 59  4 19 89]
 [66 26 58 56 37 97  9 64 22 61]
 [48 89  2 36 73 45 35 88 73 84]
 [60 44 81 15 98  6 10 46 74 67]]
```



In [19]:
```
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

data = np.random.randint(low = 1, high = 100, size = (10,10))

print("data to be plotted:\n")
print(data)
hm = sns.heatmap(data,cmap='seismic')
plt.show()
```

```
data to be plotted:

[[28 62 95 36 39 57 14 70 24 46]
 [71 15 16 17 13 58 75 57 40 26]
 [88 88 71 24 69 36 57 52 42 47]
 [51 73 19 39  5  9 40 91  6 71]
 [31 80 60 75 60 88 24 88 91 32]
 [17 66 62  5  8 37  4 68 63 30]
 [33 74 58 28 23 91  3 94 45 24]
 [59 85 19 48 15 89 61 45 58 86]
 [20 10 98 65 20 93 34 35 65 62]
 [ 5  1 51 70 51 76 76  9 47 68]]
```



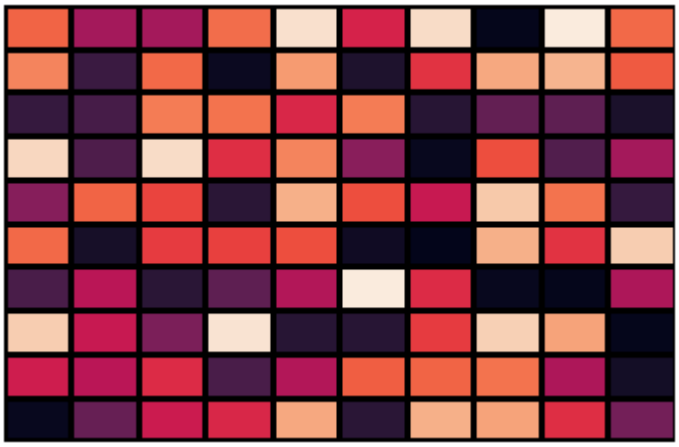
In [20]:
```
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

data = np.random.randint(low = 1, high = 100, size = (10,10))

print("data to be plotted:\n")
print(data)
hm = sns.heatmap(data,annot=True)
plt.show()
```

```
data to be plotted:

[[80 13 76 43 93 67  8 80 77  2]
 [35 57 48 66 96  5 78 56 23 37]
 [43 45 54 78 19 72 66 76 56 77]
 [82 73 83 37 42 36 81 27 53 13]
 [97 47 67 45  1 45 48 27 55 85]
 [68 78 89 14 42 17 95 47 73 17]
 [32 84 81 33  6 69 18 36 36 60]
 [58 96 18 45  1 29 94 53 10 87]
 [36 50 74 57 30 81 67 58 97 44]
 [43 72 90 92  2 71 92 17 90 11]]
```

In [22]:

```
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

data = np.random.randint(low = 1, high = 100, size = (10,10))

print("data to be plotted:\n")
print(data)
hm = sns.heatmap(data,linewidths=2,linecolor='black',cbar=False,xticklabels=False,yt
plt.show()
```

```
data to be plotted:

[[67 41 41 69 96 53 95  2 99 68]
 [74 16 68  4 79  9 57 82 85 65]
 [15 19 72 70 54 72 11 26 25  8]
 [94 21 95 56 74 35  3 63 22 41]
 [34 67 61 12 84 63 49 90 70 15]
 [68  7 59 60 63  5  1 84 57 91]
 [20 46 12 25 44 99 55  3  2 43]
 [91 49 32 97 11 11 59 92 81  2]
 [51 46 55 20 44 66 67 70 43  6]
 [ 3 27 50 54 82 12 84 81 56 30]]
```

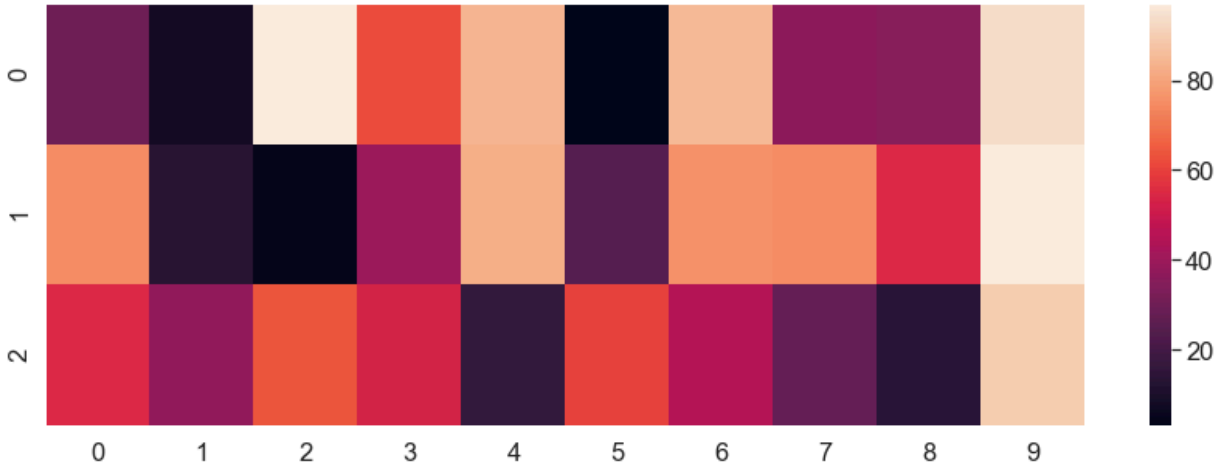


In [23]:

```
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

plt.figure(figsize=(15,5))
data = np.random.randint(low = 1, high = 100, size = (3,10))

print("data to be plotted:\n")
print(data)
```

```
hm = sns.heatmap(data)
plt.show()
```

```
data to be plotted:

[[30  8 97 62 84  3 85 37 35 94]
 [75 13  4 40 83 25 76 75 55 97]
 [55 38 64 53 16 60 45 28 14 90]]
```



In [ ]: