

```
In [3]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import nltk
import seaborn as sns

plt.style.use('ggplot')
```

```
In [6]: df = pd.read_csv('Data/amarzon.csv')# 한글깨짐방지
df
```

```
Out[6]:
```

	sentiments	cleaned_review	cleaned_review_length	review_score
0	positive	i wish would have gotten one earlier love it a...	19	5
1	neutral	i ve learned this lesson again open the packag...	88	1
2	neutral	it is so slow and lags find better option	9	2
3	neutral	roller ball stopped working within months of m...	12	1
4	neutral	i like the color and size but it few days out ...	21	1
...
17335	positive	i love this speaker and love can take it anywh...	30	5
17336	positive	i use it in my house easy to connect and loud ...	13	4
17337	positive	the bass is good and the battery is amazing mu...	41	5
17338	positive	love it	2	5
17339	neutral	mono speaker	2	5

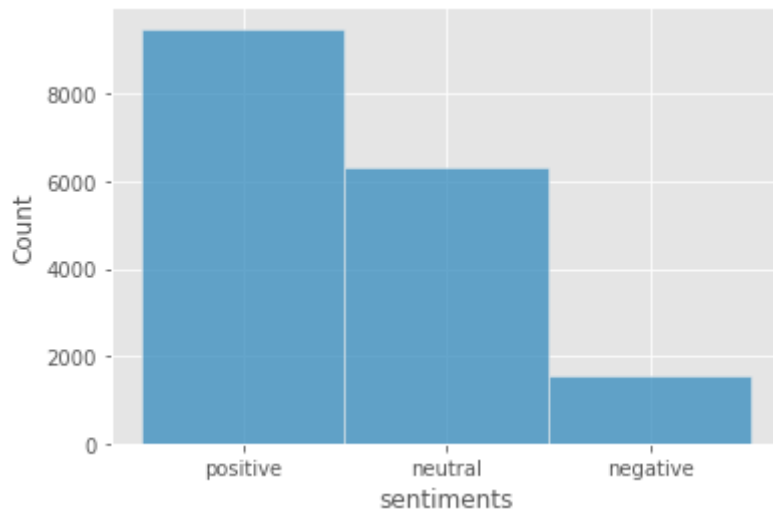
17340 rows × 4 columns

```
In [11]: df.shape
```

```
Out[11]: (17340, 4)
```

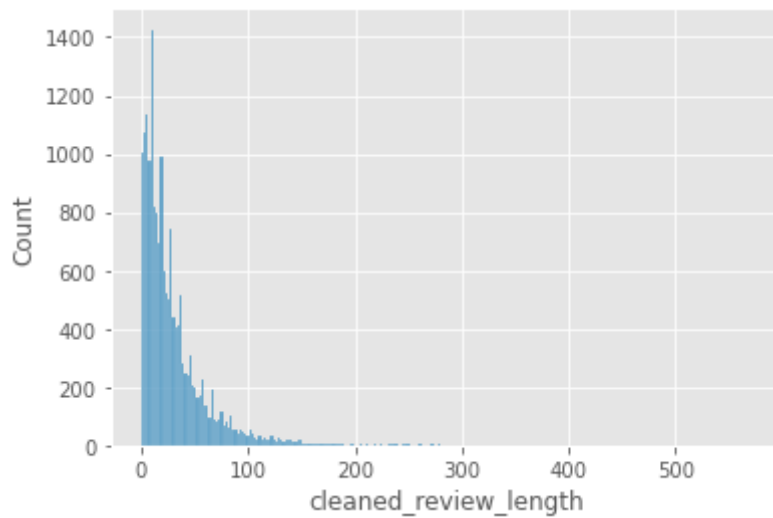
```
In [7]: sns.histplot(df['sentiments'])
```

```
Out[7]: <AxesSubplot:xlabel='sentiments', ylabel='Count'>
```



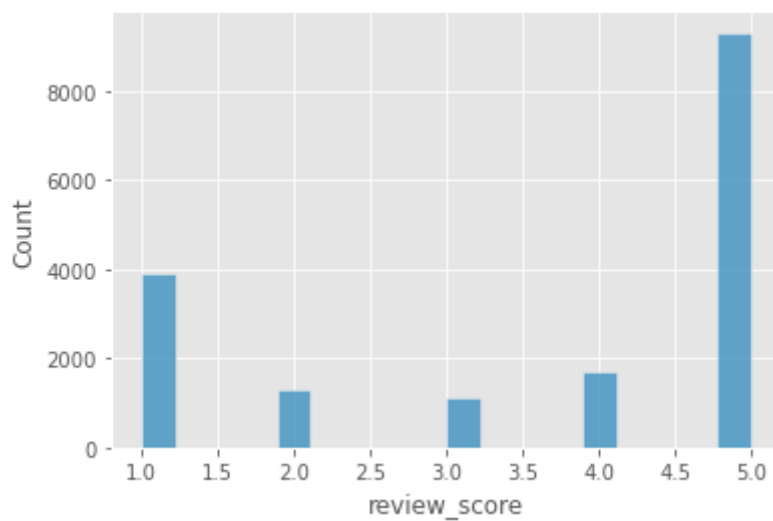
```
In [8]: sns.histplot(df['cleaned_review_length'])
```

```
Out[8]: <AxesSubplot:xlabel='cleaned_review_length', ylabel='Count'>
```



```
In [9]: sns.histplot(df['review_score'])
```

```
Out[9]: <AxesSubplot:xlabel='review_score', ylabel='Count'>
```



```
In [11]: df1 = pd.read_csv('Data/0.1.csv')# 한글깨짐방지
          df1
```

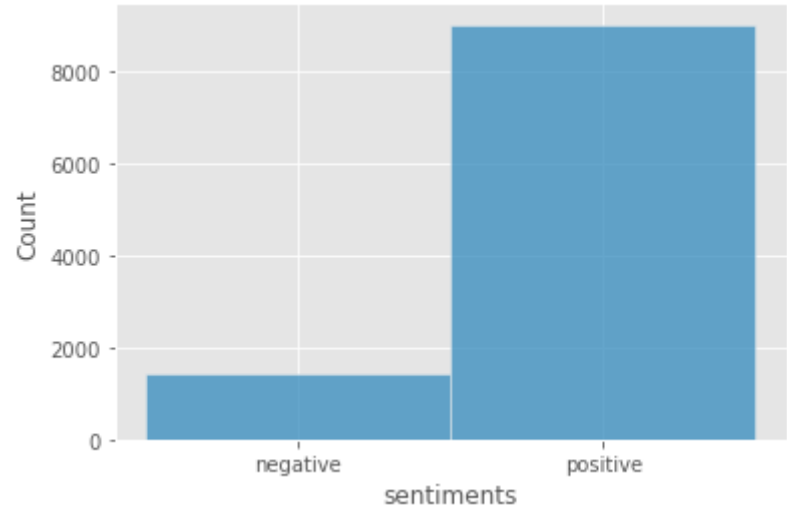
Out[11]:

	sentiments	cleaned_review	cleaned_review_length	review_score
0	negative	failed to work in months	1	1
1	negative	so bad quality and uncomfortable	1	1
2	negative	this mouse was bad quality	1	1
3	negative	dissatisfied darn thing stopped working	1	1
4	negative	failed to work in months	1	1
...
10423	positive	it pretty mouse just some notes plastic bit th...	99	5
10424	positive	i not rating this one star because it is cute ...	99	5
10425	positive	it pretty comfortable and the noise canceling ...	99	5
10426	positive	i use this for when am showering and got it to...	99	5
10427	positive	very nice work done on these speakers the soun...	99	5

10428 rows × 4 columns

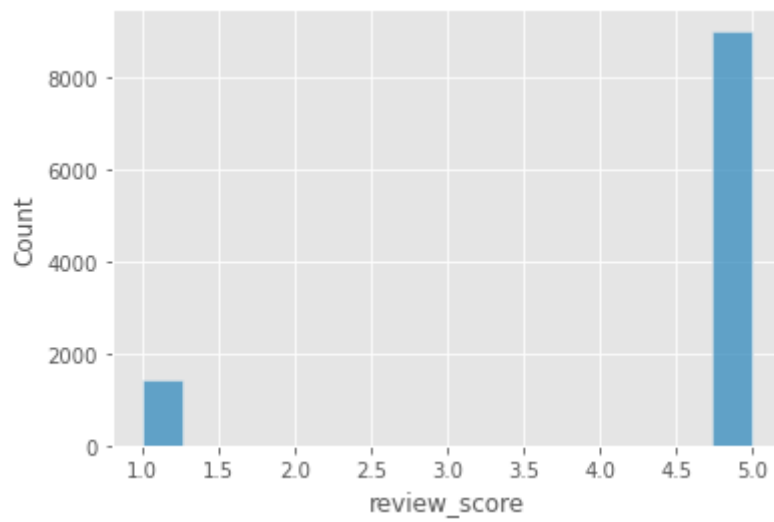
In [12]: `sns.histplot(df1['sentiments'])`

Out[12]: `<AxesSubplot:xlabel='sentiments', ylabel='Count'>`



In [13]: `sns.histplot(df1['review_score'])`

Out[13]: `<AxesSubplot:xlabel='review_score', ylabel='Count'>`



```
In [14]: sns.histplot(df1['cleaned_review_length'])
```

```
Out[14]: <AxesSubplot:xlabel='cleaned_review_length', ylabel='Count'>
```

