In [27]:
```
import pandas as pd #media,varianza y dev estandar
import matplotlib as plt
import seaborn as sns
```

In [28]:
```
df = pd.read_csv('tripadvisor_hotel_reviews.csv');
df
```

Out[28]:

	Review	Rating
0	nice hotel expensive parking got good deal sta...	4
1	ok nothing special charge diamond member hilto...	2
2	nice rooms not 4* experience hotel monaco seat...	3
3	unique, great stay, wonderful time hotel monac...	5
4	great stay great stay, went seahawk game aweso...	5
...	...	...
20486	best kept secret 3rd time staying charm, not 5...	5
20487	great location price view hotel great quick pl...	4
20488	ok just looks nice modern outside, desk staff ...	2
20489	hotel theft ruined vacation hotel opened sept ...	1
20490	people talking, ca n't believe excellent ratin...	2

20491 rows × 2 columns

In [29]:
```
df['Rating'].median() #muestra la media
```

Out[29]:
```
4.0
```

In [30]:
```
df['Rating'].var() #muestra la varianza
```

Out[30]:
```
1.5203624326830831
```

In [31]:
```
df['Rating'].std() #muestra la desviacion estandar
```

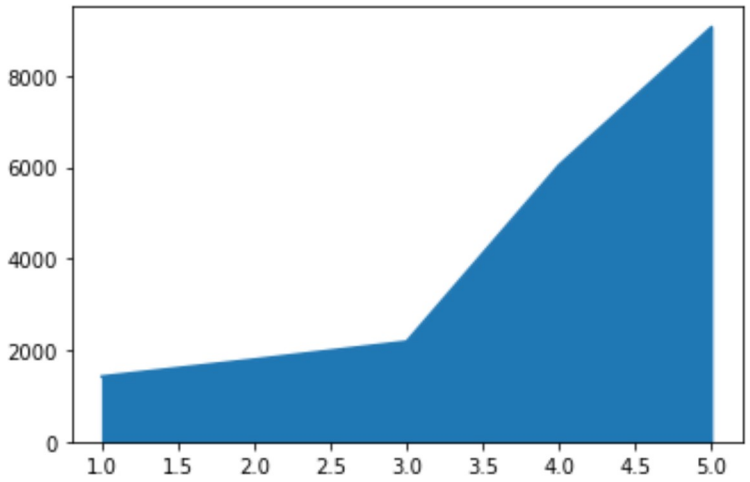
Out[31]:
```
1.2330297776952035
```

In [32]:
```
df['Rating'].describe()
```

Out[32]:
```
count    20491.000000
mean         3.952223
std          1.233030
min          1.000000
25%          3.000000
50%          4.000000
75%          5.000000
max          5.000000
Name: Rating, dtype: float64
```

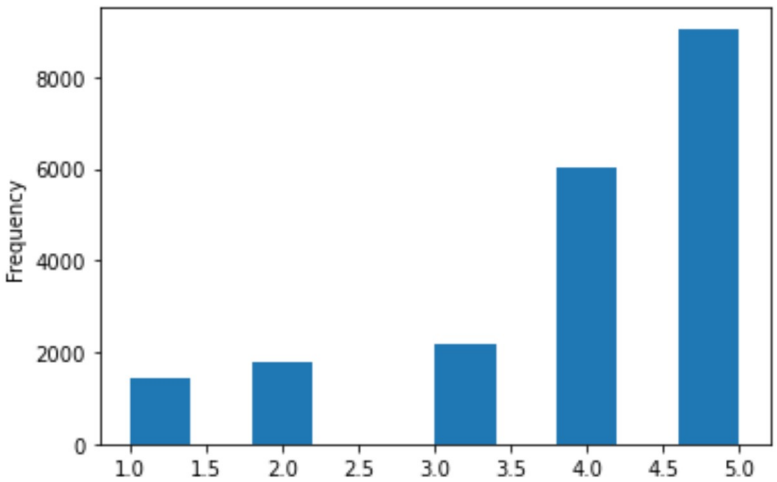
In [33]:
```
#Utilizar al menos dos formas de graficar con matplotlib
df['Rating'].value_counts().sort_index().plot.area()
```

Out[33]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x14d420ff5b0>
```



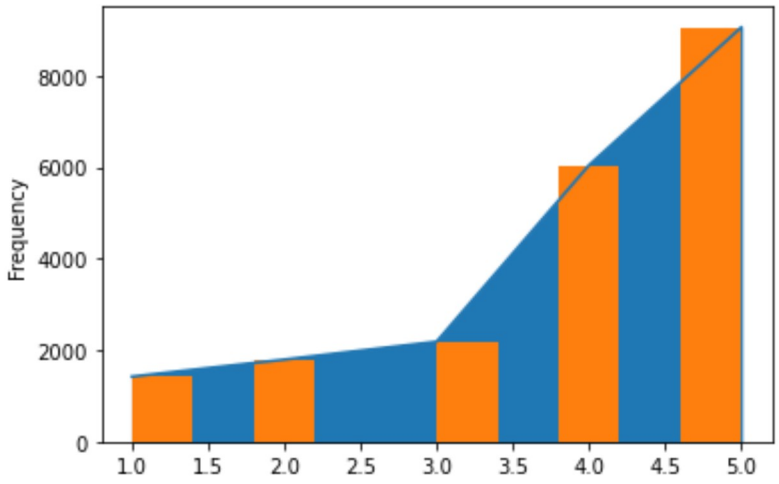
In [34]:
```
df['Rating'].plot.hist()
```

Out[34]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x14d423f2e20>
```



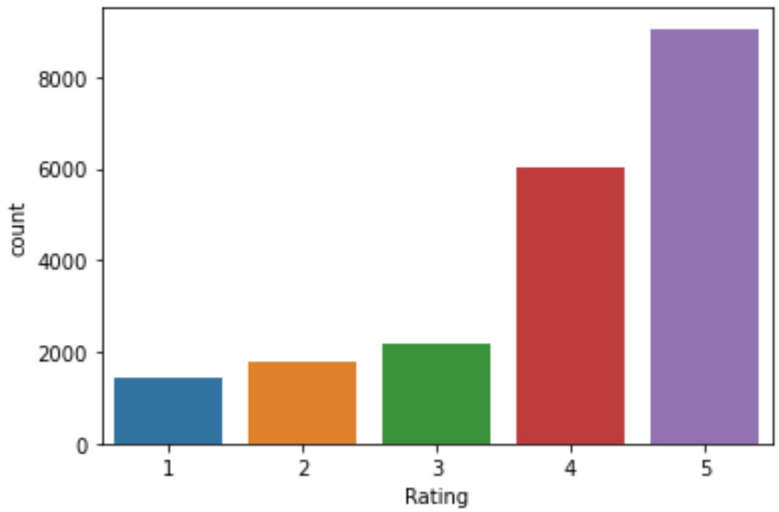
In [35]:
```
df['Rating'].value_counts().sort_index().plot.area()
df['Rating'].plot.hist()
```

Out[35]: <matplotlib.axes._subplots.AxesSubplot at 0x14d42460820>



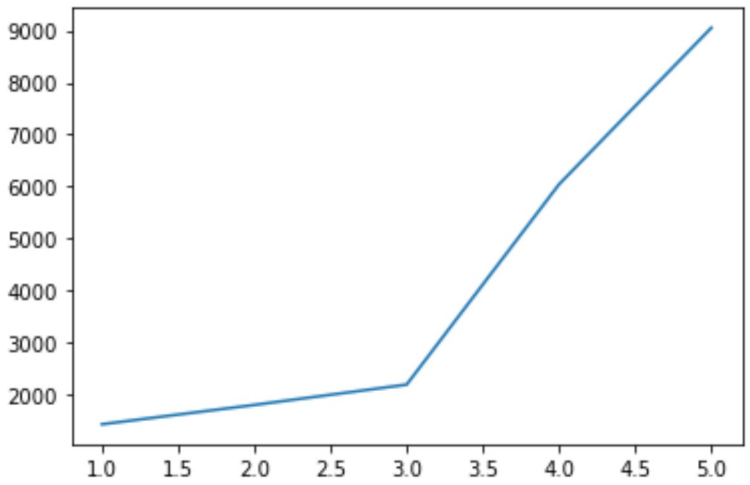
In [36]:
```
#dos de seaborn
sns.countplot(df['Rating'])
```

Out[36]: <matplotlib.axes._subplots.AxesSubplot at 0x14d424cba00>



In [37]:
```
df[df['Rating'] > 0]['Rating'].value_counts().sort_index().plot.line()
```

Out[37]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x14d42521a90>
```



In [38]:
```
sns.countplot(df['Rating'])
df[df['Rating'] > 0]['Rating'].value_counts().sort_index().plot.line()
```

Out[38]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x14d4257f850>
```