Pandas Visualization

In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

```
Matplotlib is building the font cache; this may take a moment.
```

In [4]:
```
df = pd.read_csv(r"D:\COURSES\YOUTUBE\ALEX THE ANALYST\PYTHON\Ice Cream Ratings.csv")
df=df.set_index("Date")
df
```

Out[4]:

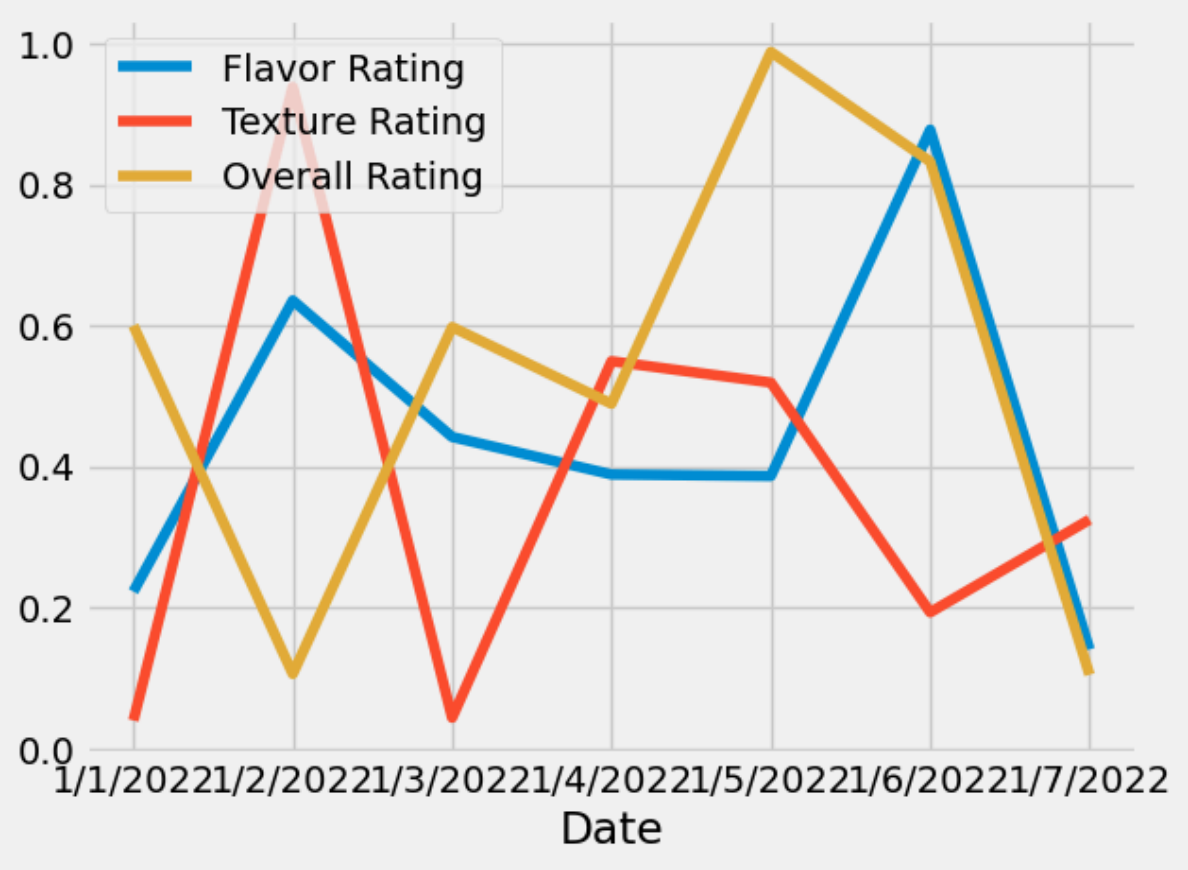
Date	Flavor Rating	Texture Rating	Overall Rating
1/1/2022	0.223090	0.040220	0.600129
1/2/2022	0.635886	0.938476	0.106264
1/3/2022	0.442323	0.044154	0.598112
1/4/2022	0.389128	0.549676	0.489353
1/5/2022	0.386887	0.519439	0.988280
1/6/2022	0.877984	0.193588	0.832827
1/7/2022	0.140995	0.325110	0.105147

In [30]:
```
print(plt.style.available)
plt.style.use('fivethirtyeight')
```

```
['Solarize_Light2', '_classic_test_patch', '_mpl-gallery', '_mpl-gallery-nogrid', 'bm
h', 'classic', 'dark_background', 'fast', 'fivethirtyeight', 'ggplot', 'grayscale',
'seaborn-v0_8', 'seaborn-v0_8-bright', 'seaborn-v0_8-colorblind', 'seaborn-v0_8-dar
k', 'seaborn-v0_8-dark-palette', 'seaborn-v0_8-darkgrid', 'seaborn-v0_8-deep', 'seabo
rn-v0_8-muted', 'seaborn-v0_8-notebook', 'seaborn-v0_8-paper', 'seaborn-v0_8-pastel',
'seaborn-v0_8-poster', 'seaborn-v0_8-talk', 'seaborn-v0_8-ticks', 'seaborn-v0_8-whit
e', 'seaborn-v0_8-whitegrid', 'tableau-colorblind10']
```

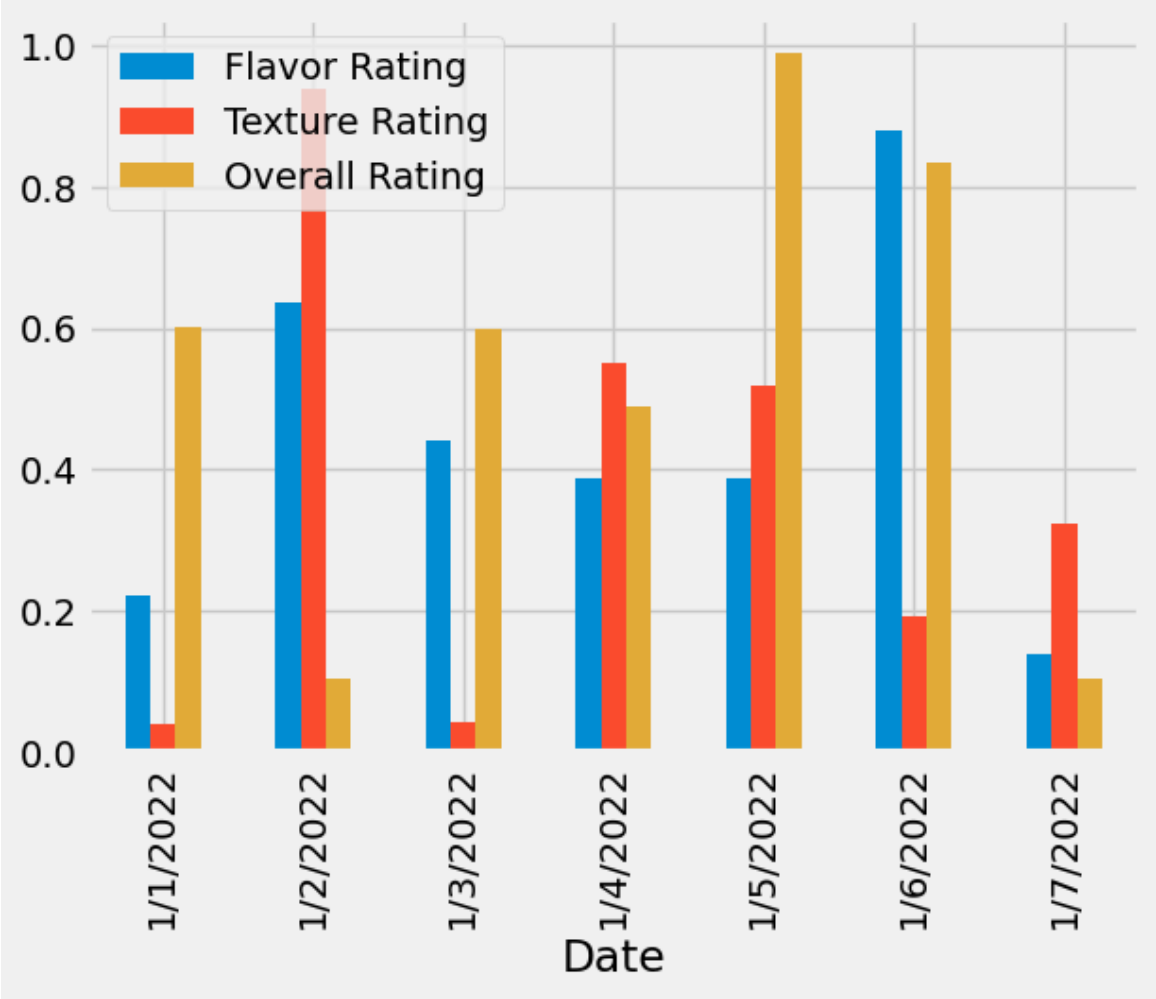
In [31]:
```
df.plot()
```

Out[31]:
```
<Axes: xlabel='Date'>
```



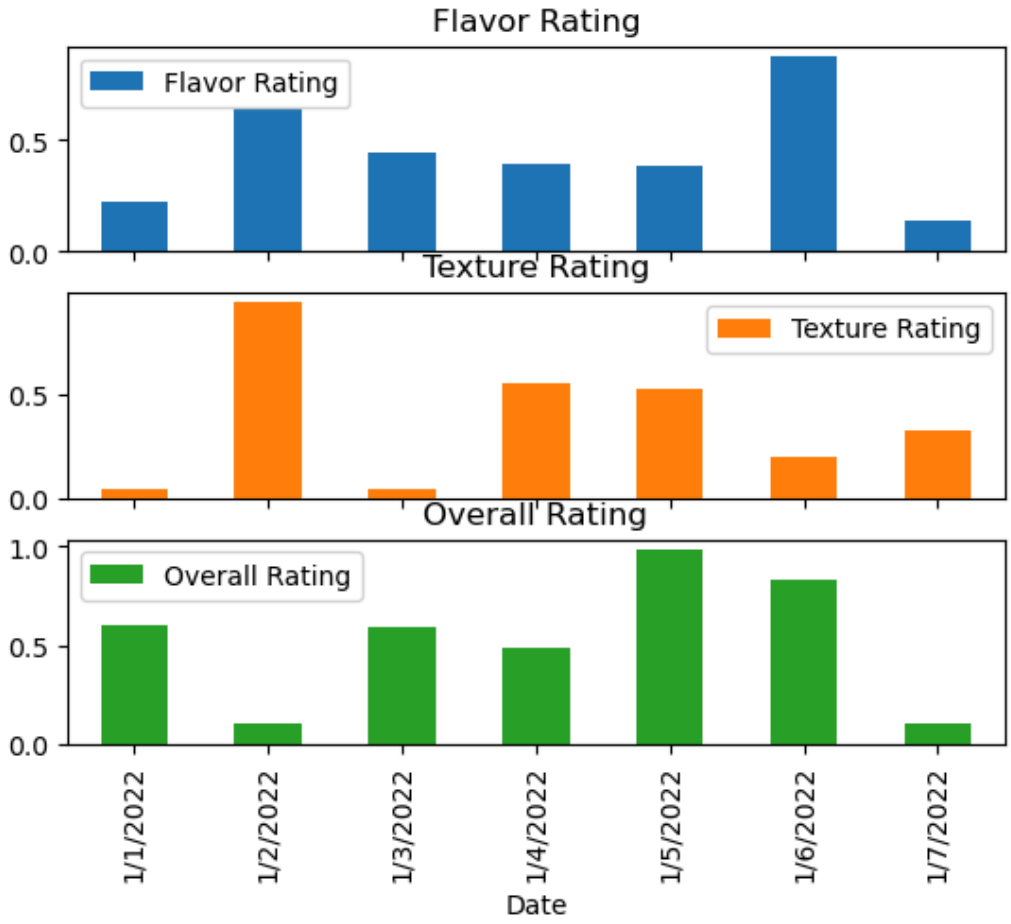
In [29]:
```
df.plot(kind = 'bar')
```

Out[29]:
```
<Axes: xlabel='Date'>
```



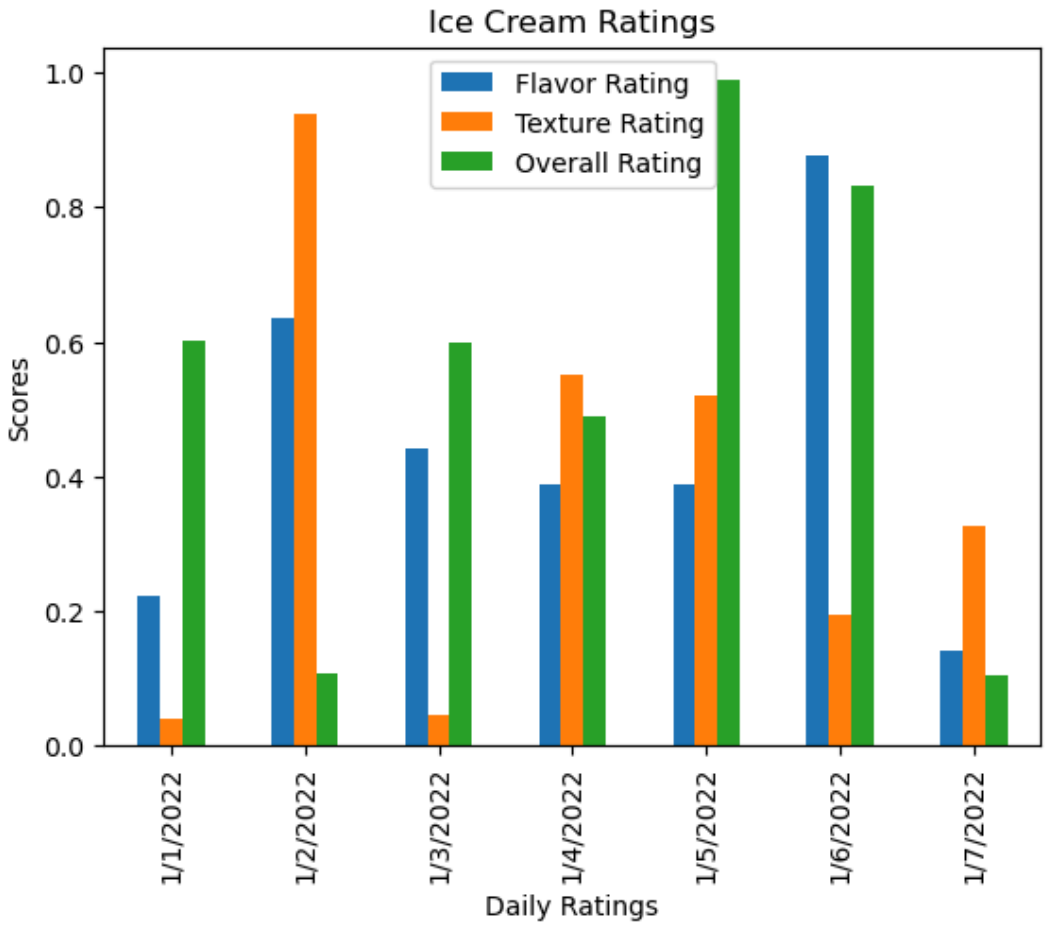
In [9]:
```
df.plot(kind = 'bar', subplots=True)
```

Out[9]:
```
array([<Axes: title={'center': 'Flavor Rating'}, xlabel='Date'>,
       <Axes: title={'center': 'Texture Rating'}, xlabel='Date'>,
       <Axes: title={'center': 'Overall Rating'}, xlabel='Date'>],
      dtype=object)
```



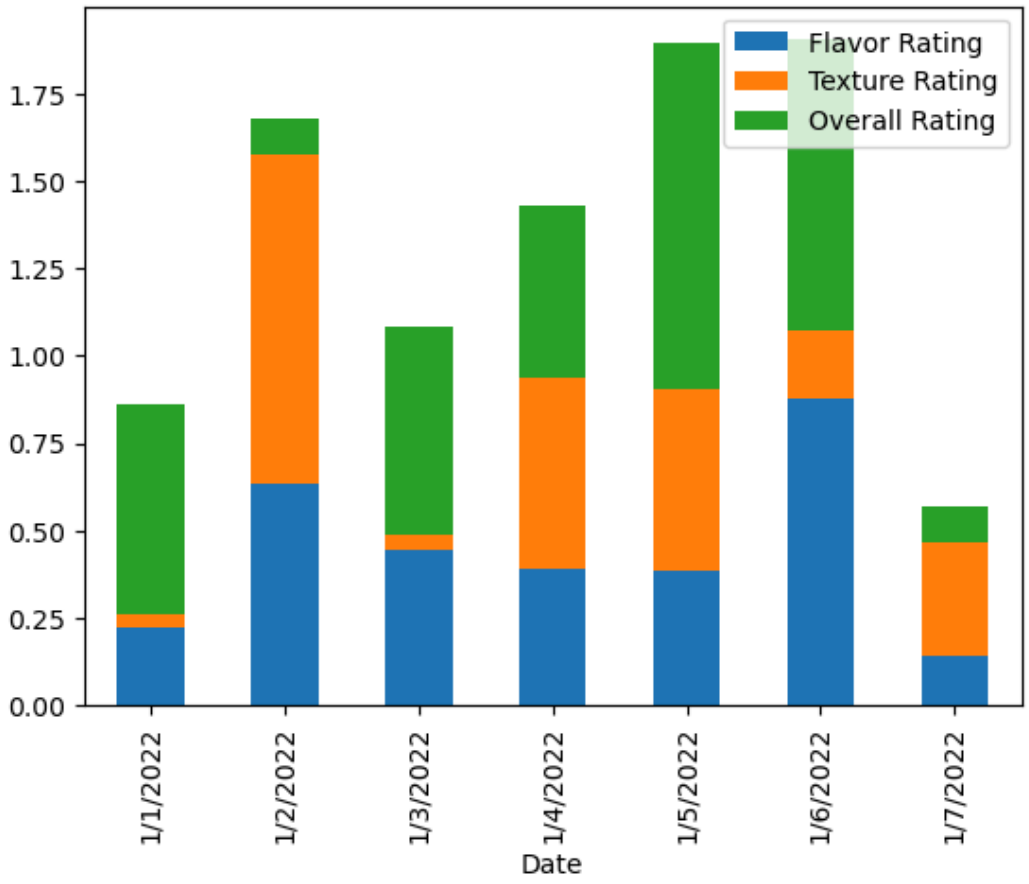
In [11]:
```
df.plot(kind = 'bar', title='Ice Cream Ratings',xlabel='Daily Ratings',ylabel='Scores'
```

Out[11]:
```
<Axes: title={'center': 'Ice Cream Ratings'}, xlabel='Daily Ratings', ylabel='Score
s'>
```



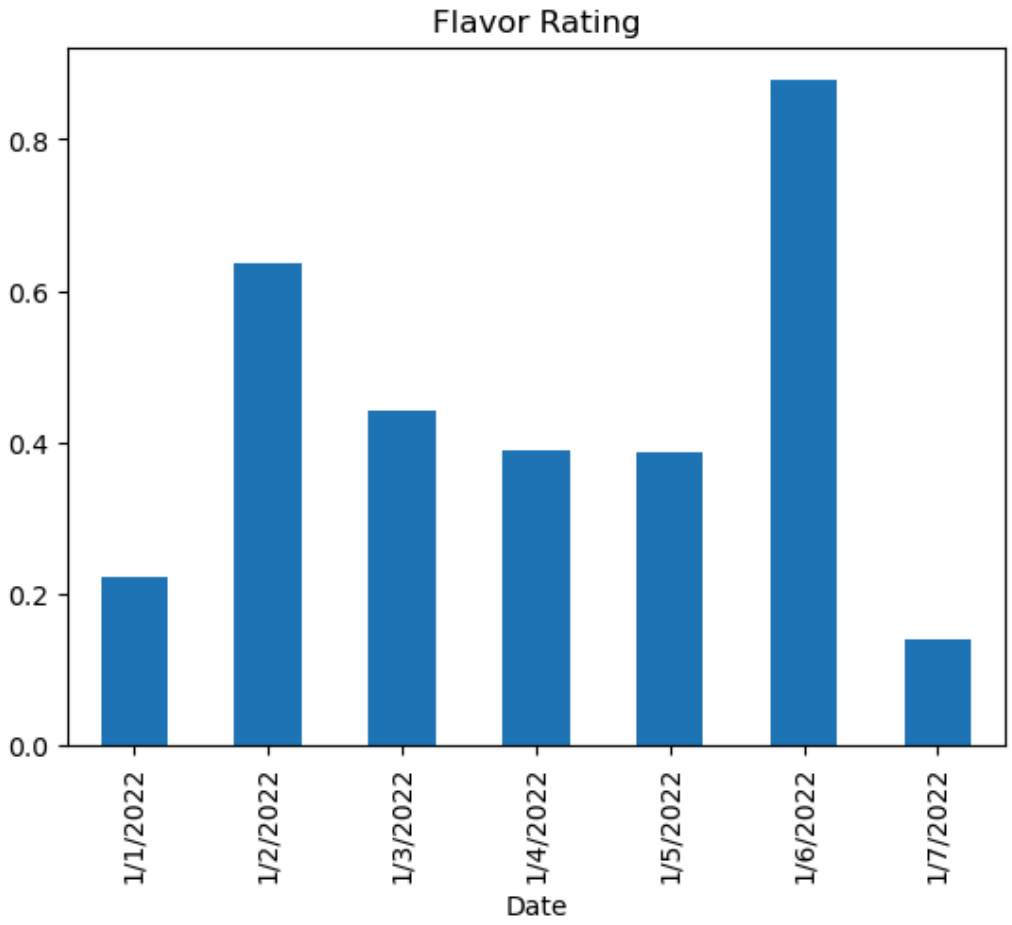
In [12]:
```
df.plot(kind = 'bar', stacked=True)
```

Out[12]: <Axes: xlabel='Date'>



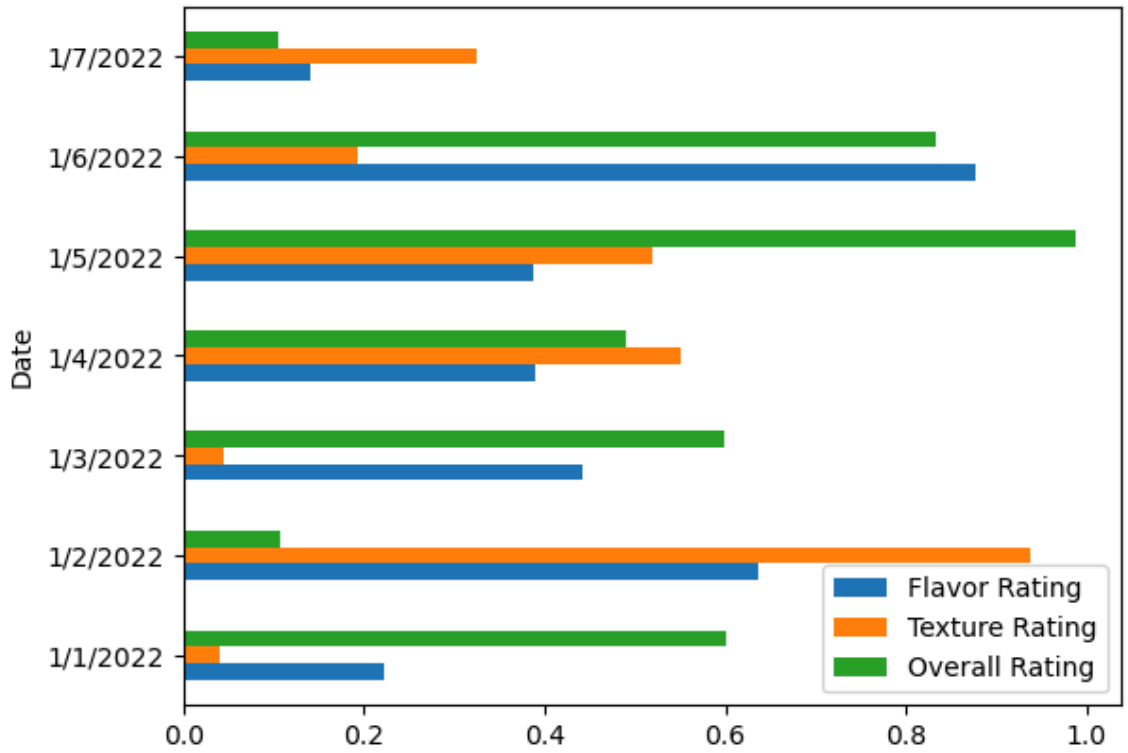
In [13]:
```
df['Flavor Rating'].plot(kind = 'bar', subplots=True)
```

Out[13]:
```
array([<Axes: title={'center': 'Flavor Rating'}, xlabel='Date'>],
      dtype=object)
```



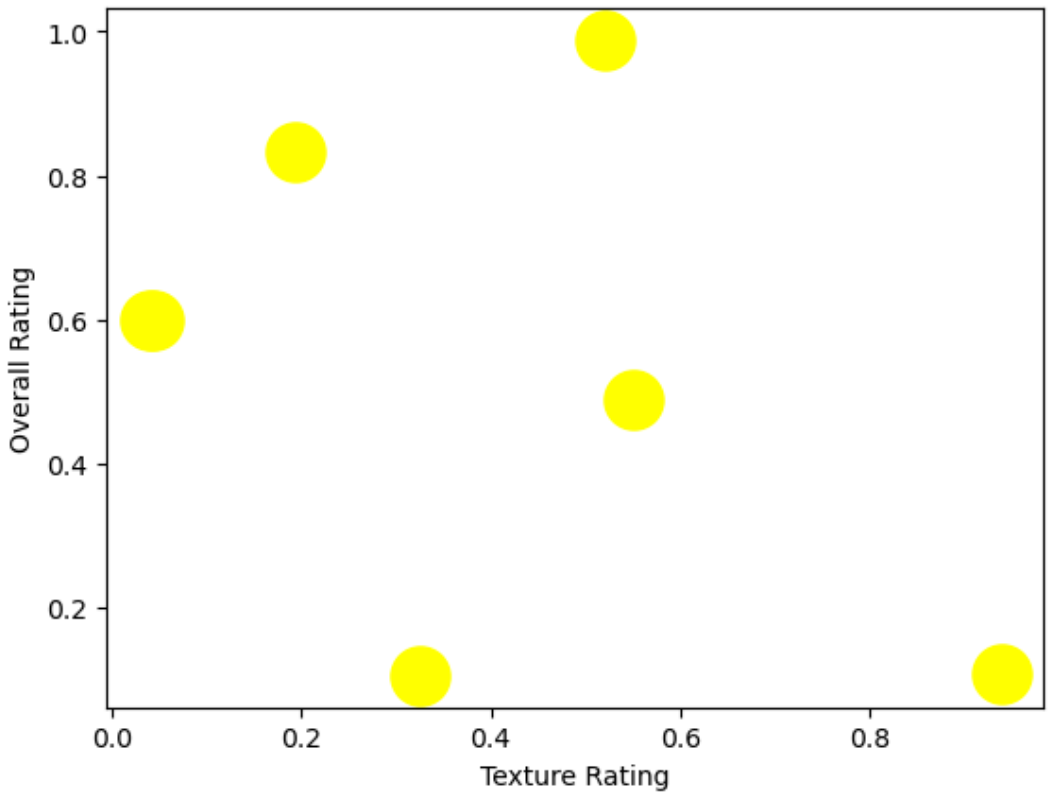
In [15]:
```
df.plot.barh()
```

Out[15]: <Axes: ylabel='Date'>



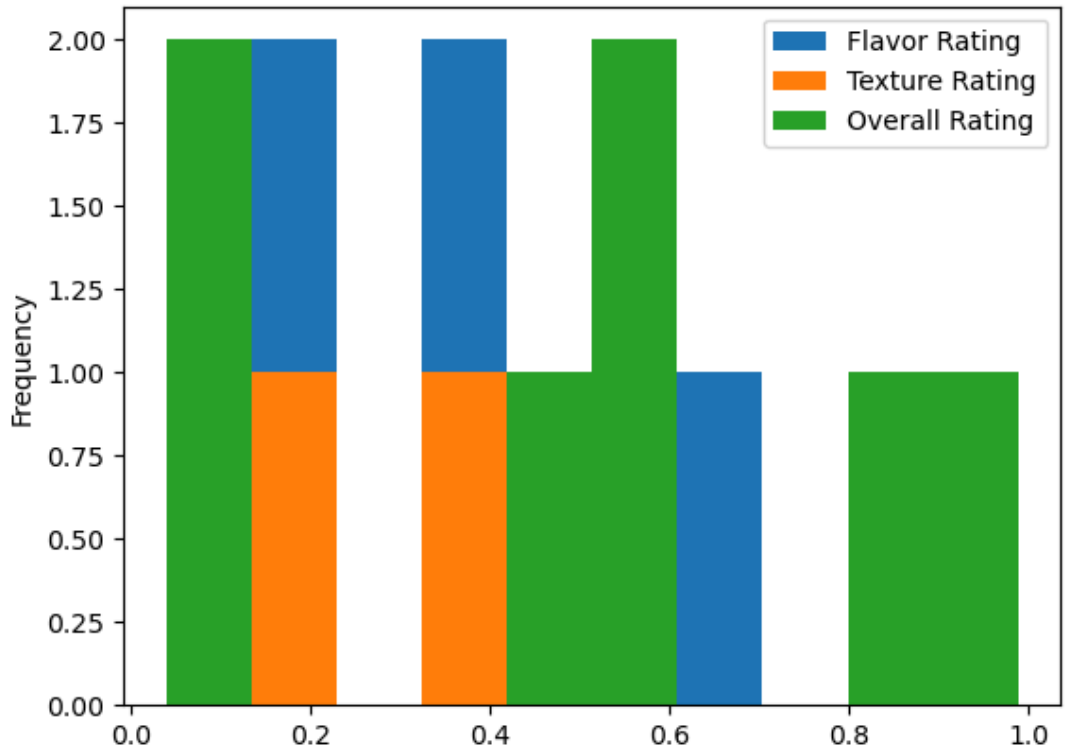
In [16]:
```
df.plot.scatter(x='Texture Rating',y='Overall Rating',s=500,c='Yellow')
```

Out[16]: <Axes: xlabel='Texture Rating', ylabel='Overall Rating'>



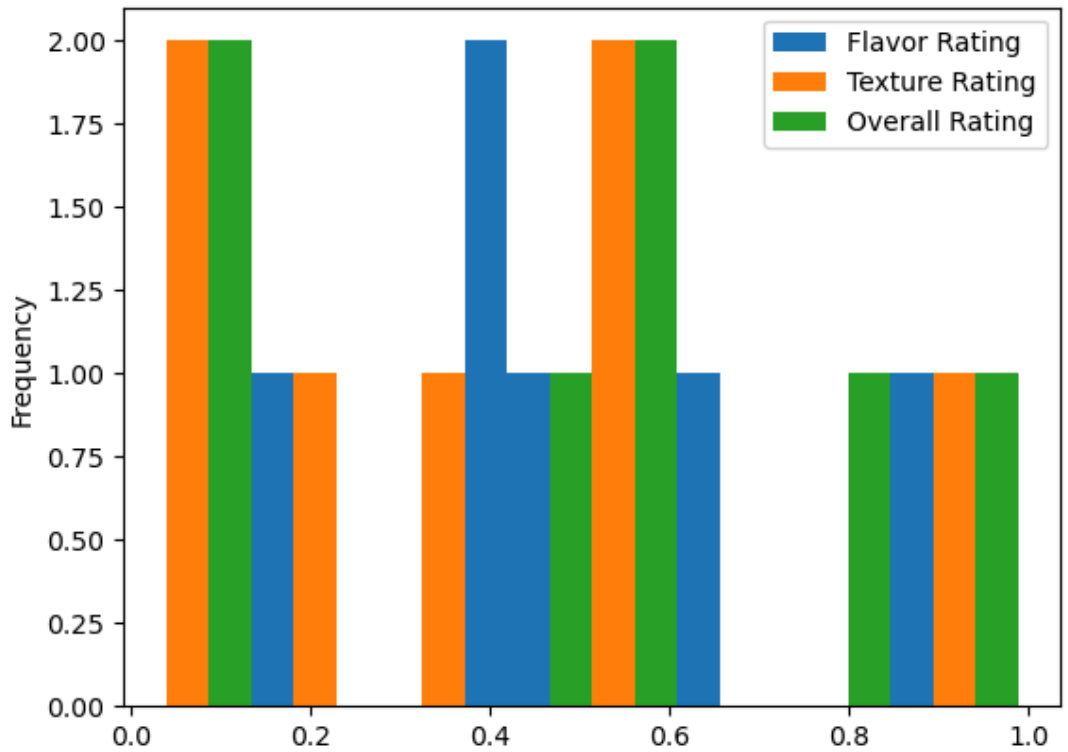
In [19]:
```
df.plot.hist()
```

Out[19]: <Axes: ylabel='Frequency'>



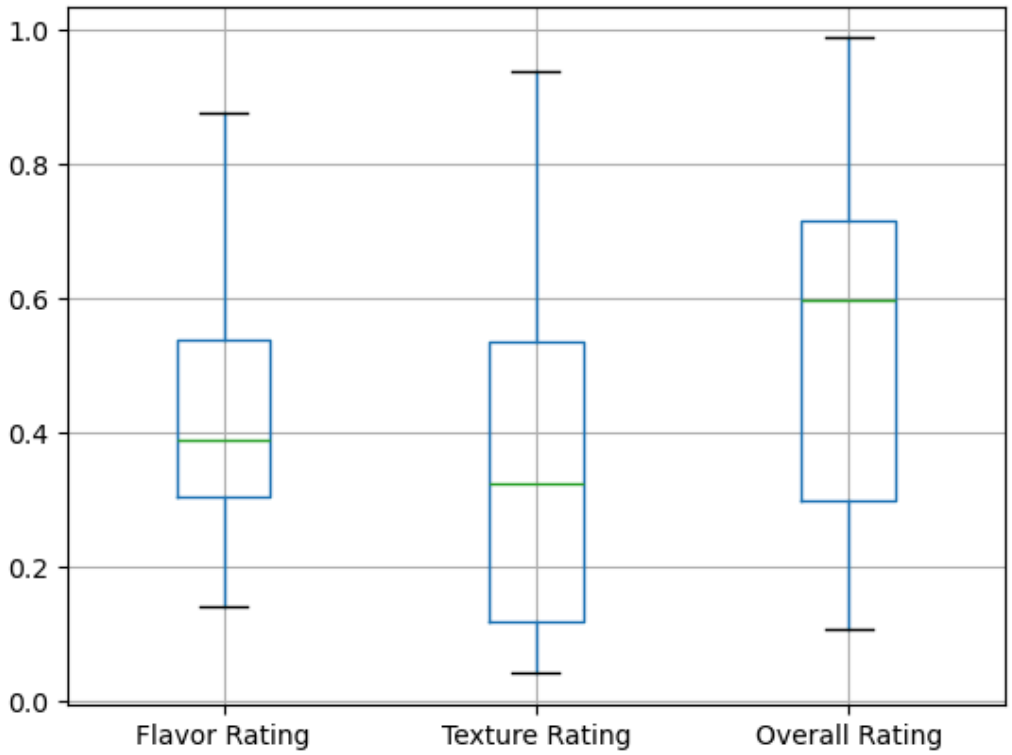
In [20]:
```
df.plot.hist(bins=20)
```

Out[20]: <Axes: ylabel='Frequency'>



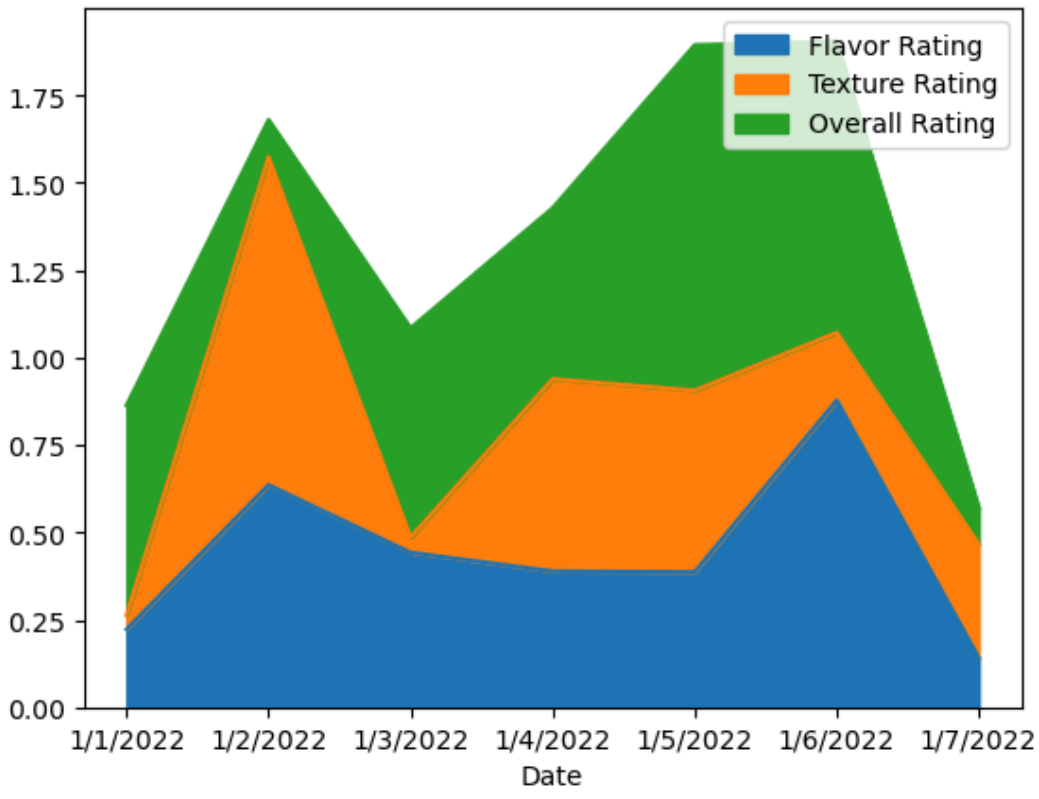
In [21]:
```
df.boxplot()
```

Out[21]: <Axes: >



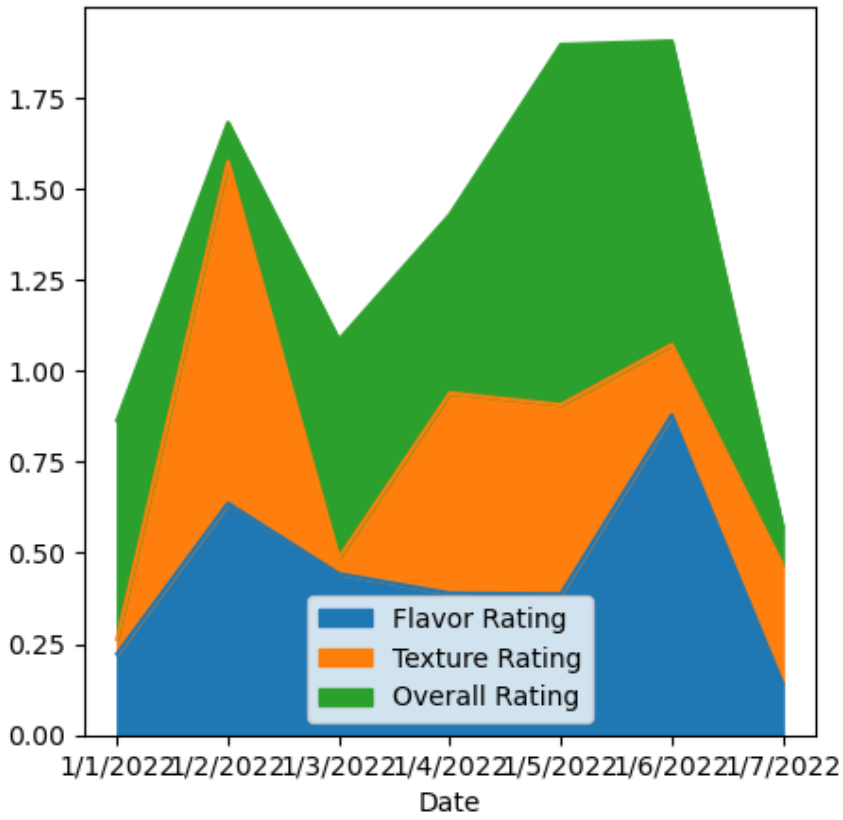
In [22]:
```
df.plot.area()
```

Out[22]: <Axes: xlabel='Date'>



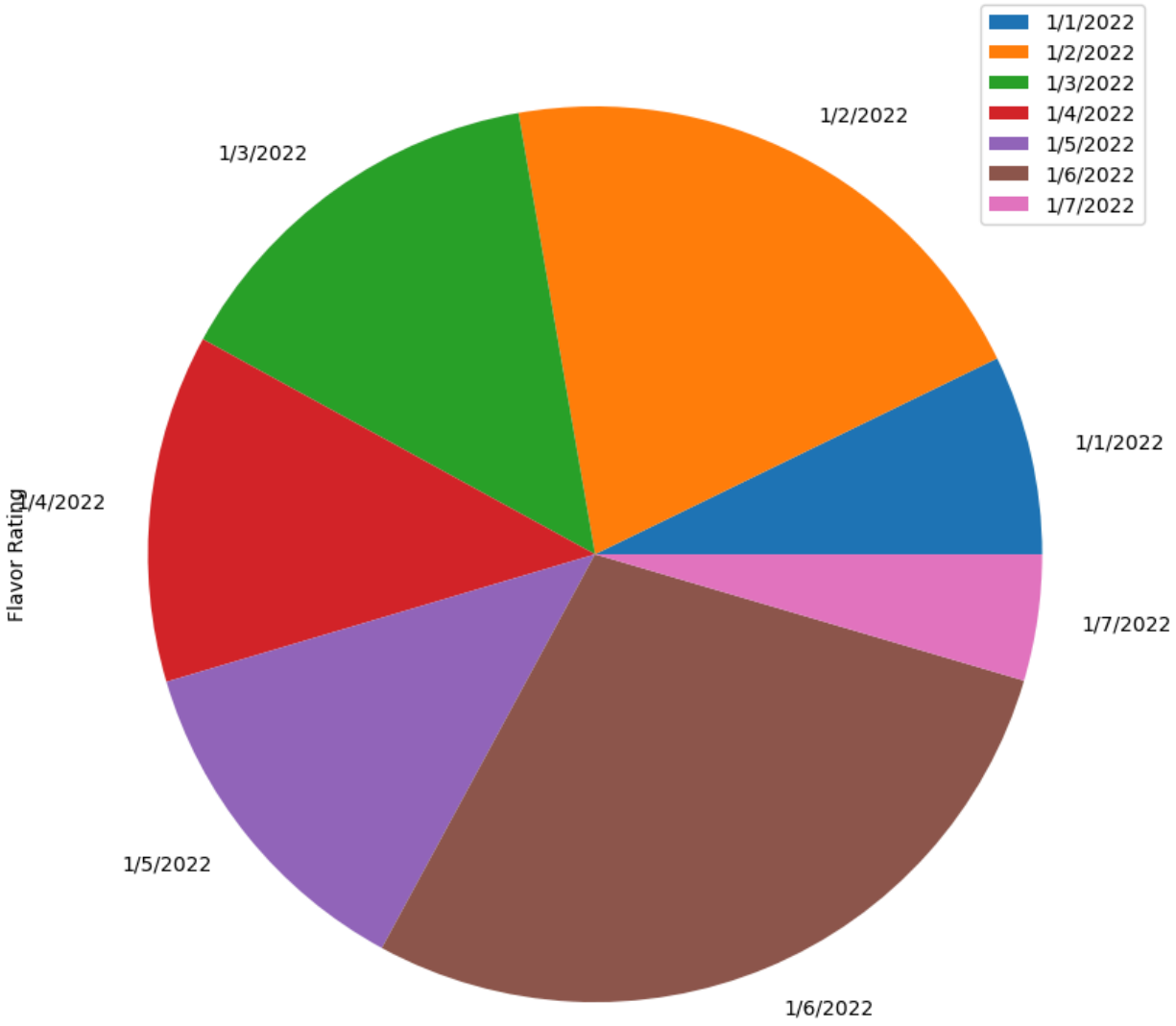
In [24]:
```
df.plot.area(figsize=(5,5))
```

Out[24]:
```
<Axes: xlabel='Date'>
```



In [26]:
```
df.plot.pie(y='Flavor Rating',figsize=(10,10))
```

Out[26]: <Axes: ylabel='Flavor Rating'>



In [ ]:
```

```