project2-1

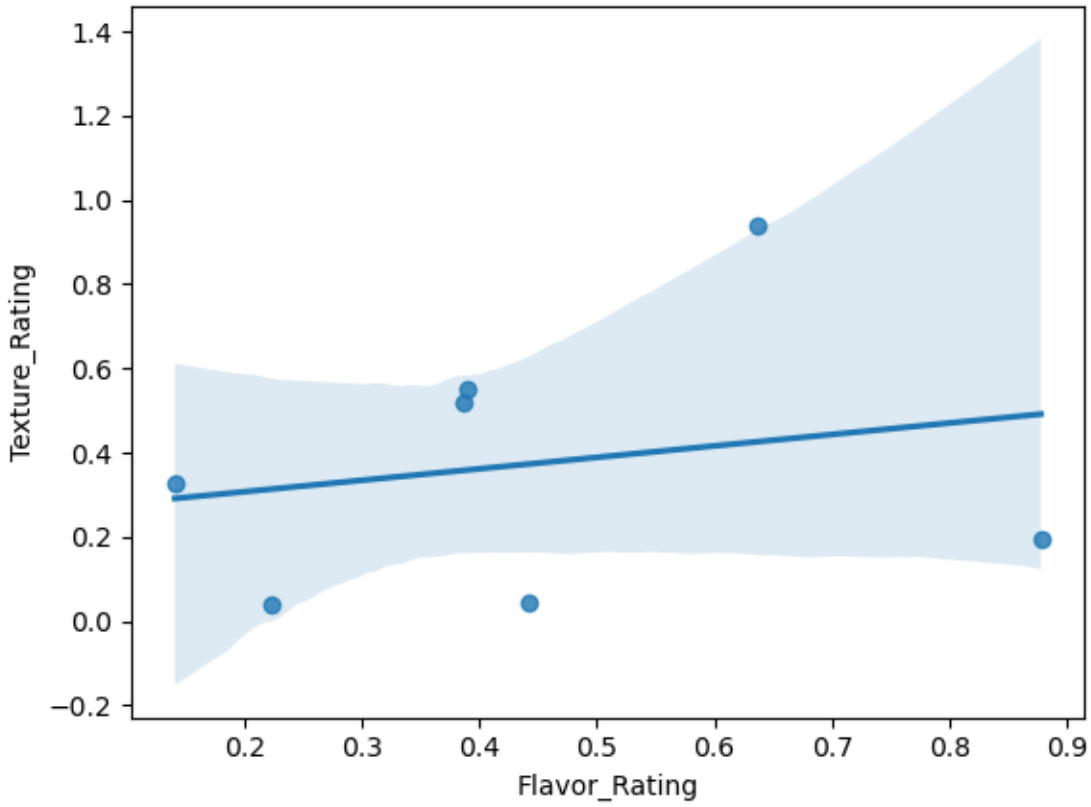
July 31, 2024

[10]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
data = pd.read_csv('ice.csv')
df = data.drop(['Date'],axis=1)
print(df)
print()
print()
print("*********mean at row_wise*********")
mean=df.mean(axis=1)
print(mean)
print()
print()
print("*********mean at coloum_wise*********")
print(df.mean())
print()
print()
print("*********median at row_wise*********")
print(df.median(axis=1))
print()
print()
print("*********median at coloum_wise*********")
print(df.median())
print()
print()
print("*********mode*********")
print(df.mode())
print()
print()
print("*********Coefficient Corelation*********")
print(df.corr())
## Coefficient Corelation Graph
sns.regplot(x=df.Flavor_Rating,y=df.Texture_Rating)
plt.show()
print()
print()
```

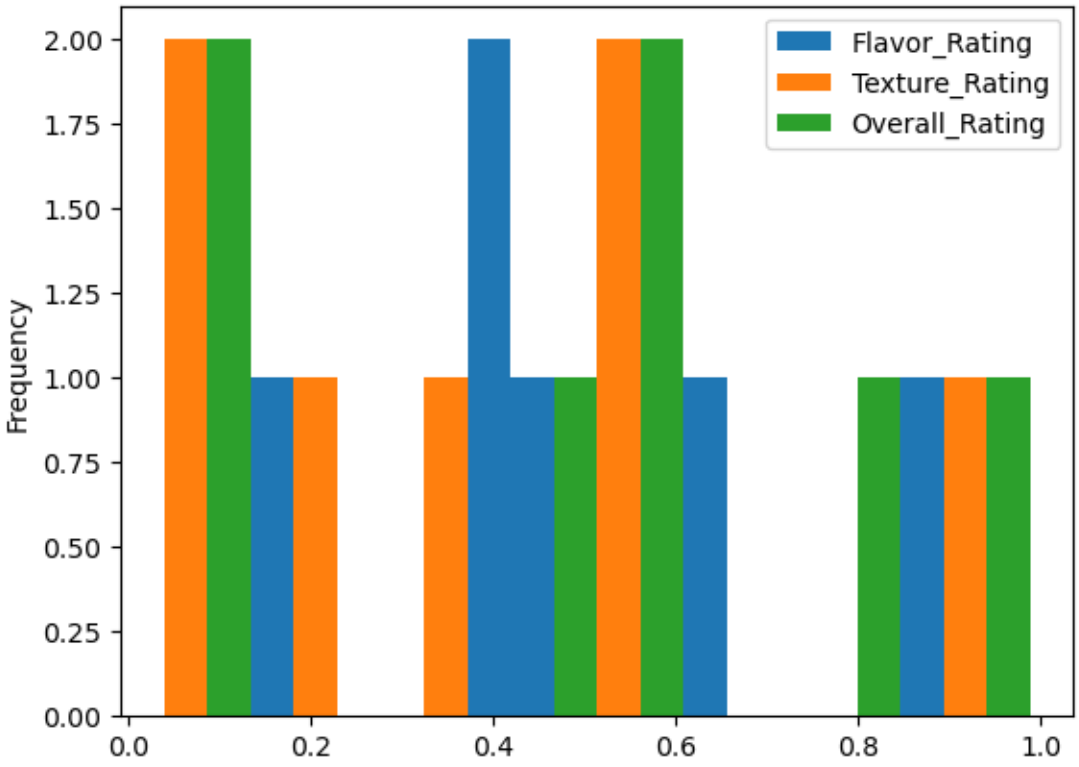
```
df.plot.hist(bins=20)
df.plot.scatter(x = 'Texture_Rating', y = 'Overall_Rating', s = 500, c =␣
↪'yellow')
df.plot(kind = 'line', title = 'Ice Cream Ratings', xlabel = 'Daily Ratings',␣
↪ylabel = 'Scores')
df.plot.pie(y='Flavor_Rating',figsize=(10,10))
df.plot.area(figsize = (10,5))
```

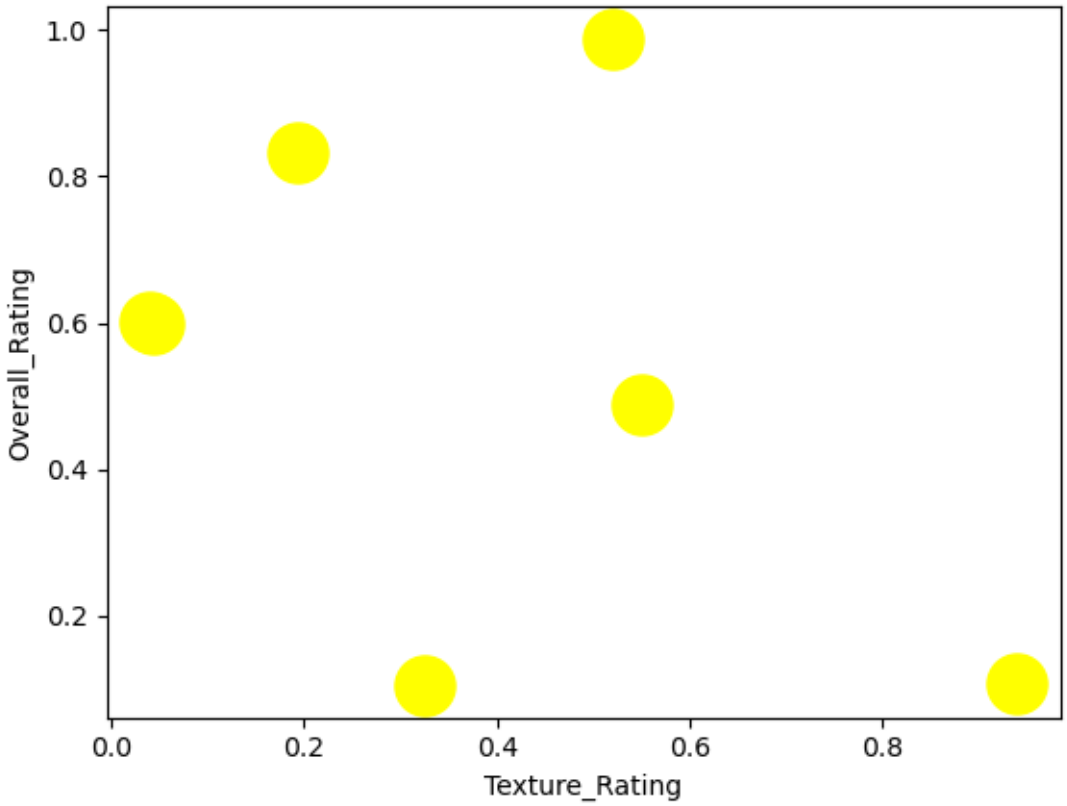
```
   Flavor_Rating  Texture_Rating  Overall_Rating
0       0.223090        0.040220        0.600129
1       0.635886        0.938476        0.106264
2       0.442323        0.044154        0.598112
3       0.389128        0.549676        0.489353
4       0.386887        0.519439        0.988280
5       0.877984        0.193588        0.832827
6       0.140995        0.325110        0.105147


*********mean at row_wise*********
0    0.287813
1    0.560208
2    0.361530
3    0.476052
4    0.631535
5    0.634799
6    0.190418
dtype: float64


*********mean at coloum_wise*********
Flavor_Rating     0.442328
Texture_Rating    0.372952
Overall_Rating    0.531445
dtype: float64


*********median at row_wise*********
0    0.223090
1    0.635886
2    0.442323
3    0.489353
4    0.519439
5    0.832827
6    0.140995
dtype: float64
```

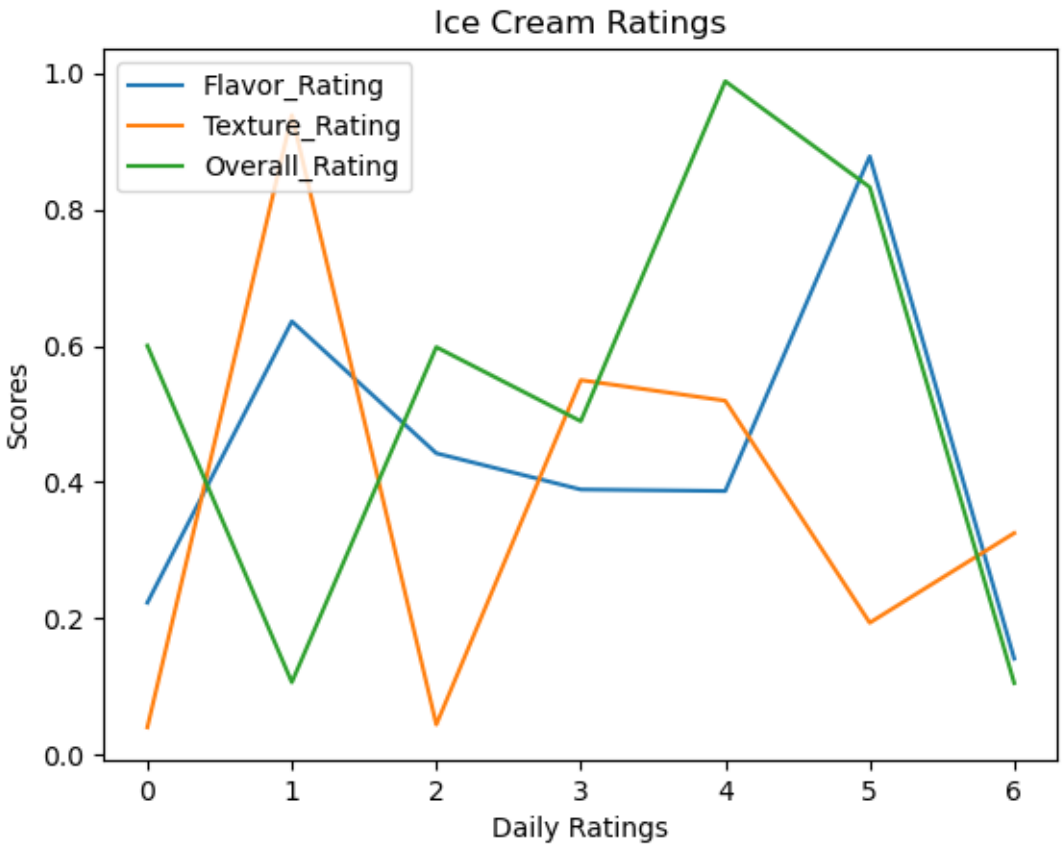
```
*********median at coloum_wise*********
Flavor_Rating     0.389128
Texture_Rating    0.325110
Overall_Rating    0.598112
dtype: float64


*********mode**********
   Flavor_Rating  Texture_Rating  Overall_Rating
0       0.140995        0.040220        0.105147
1       0.223090        0.044154        0.106264
2       0.386887        0.193588        0.489353
3       0.389128        0.325110        0.598112
4       0.442323        0.519439        0.600129
5       0.635886        0.549676        0.832827
6       0.877984        0.938476        0.988280


*********Coefficient Corelation*********
                Flavor_Rating  Texture_Rating  Overall_Rating
Flavor_Rating        1.000000        0.209661        0.278421
Texture_Rating       0.209661        1.000000       -0.399729
Overall_Rating       0.278421       -0.399729        1.000000
```

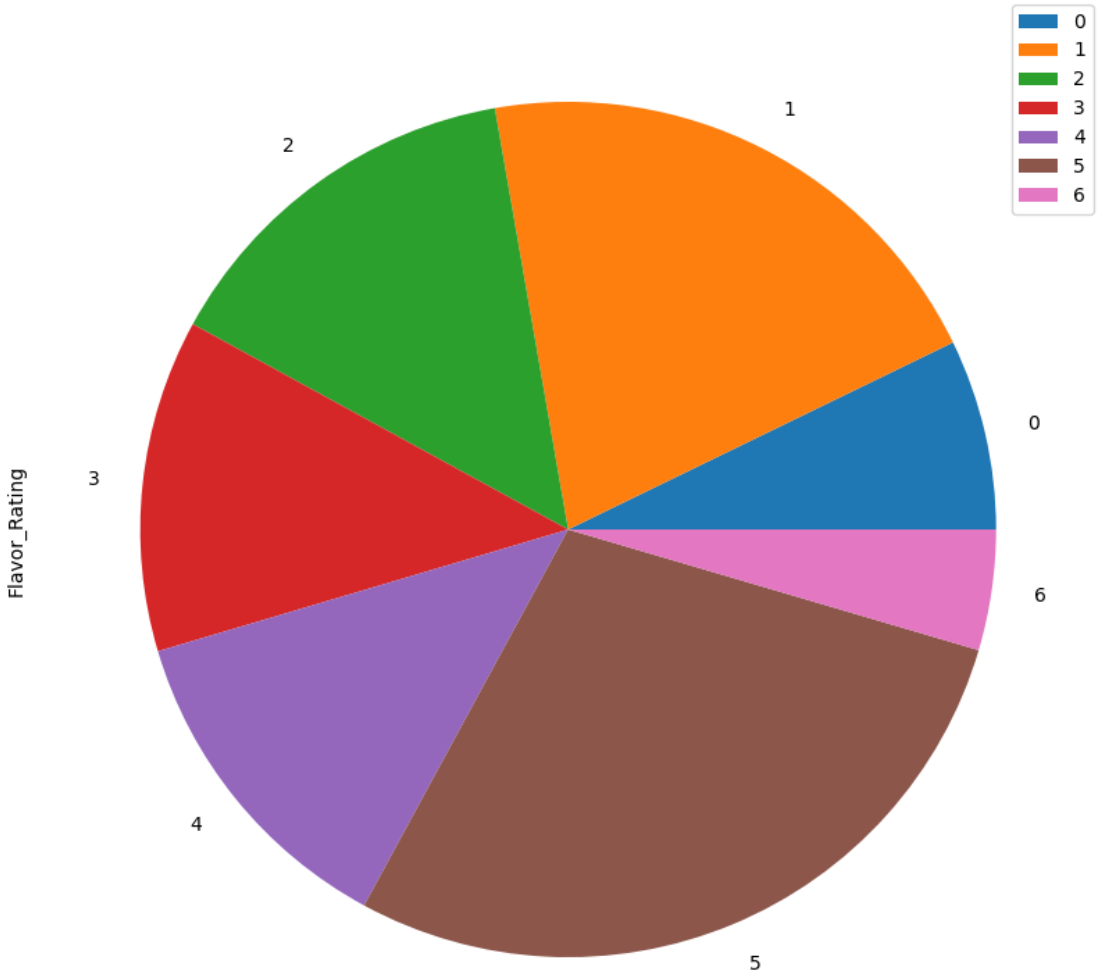


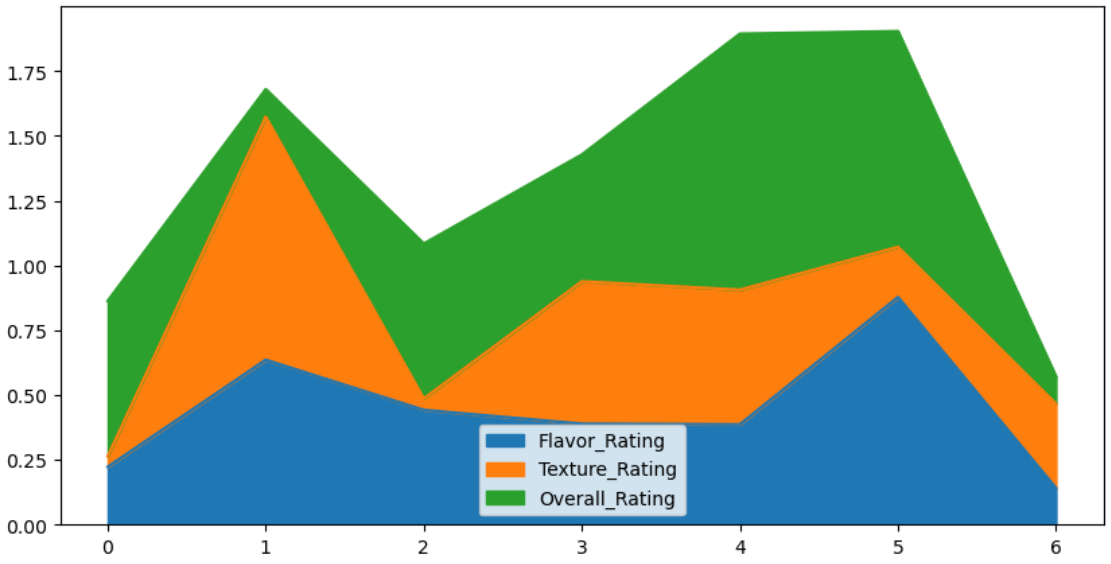
[10]: <Axes: >


Flavor_Rating
Texture_Rating
Overall_Rating
Frequency
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0.0
0.2
0.4
0.6
0.8
1.0


1.0
0.8
0.6
0.4
0.2
Overall_Rating
0.0
0.2
0.4
0.6
0.8
Texture_Rating


Ice Cream Ratings
Flavor_Rating
Texture_Rating
Overall_Rating
Scores
Daily Ratings
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
6


0
1
2
3
4
5
6
Flavor_Rating


1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0
1
2
3
4
5
6
Flavor_Rating
Texture_Rating
Overall_Rating

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