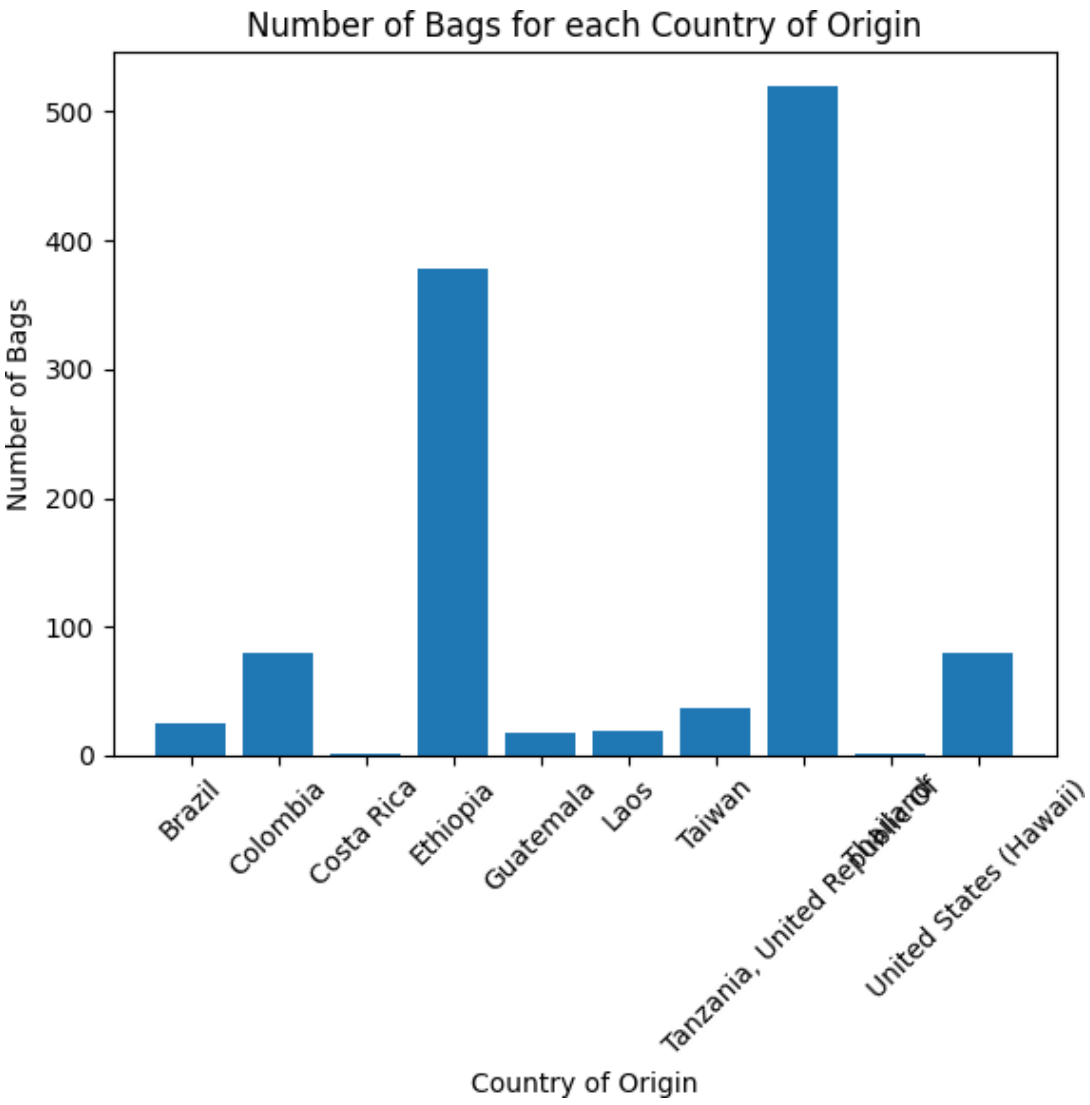
Sanchita Patil

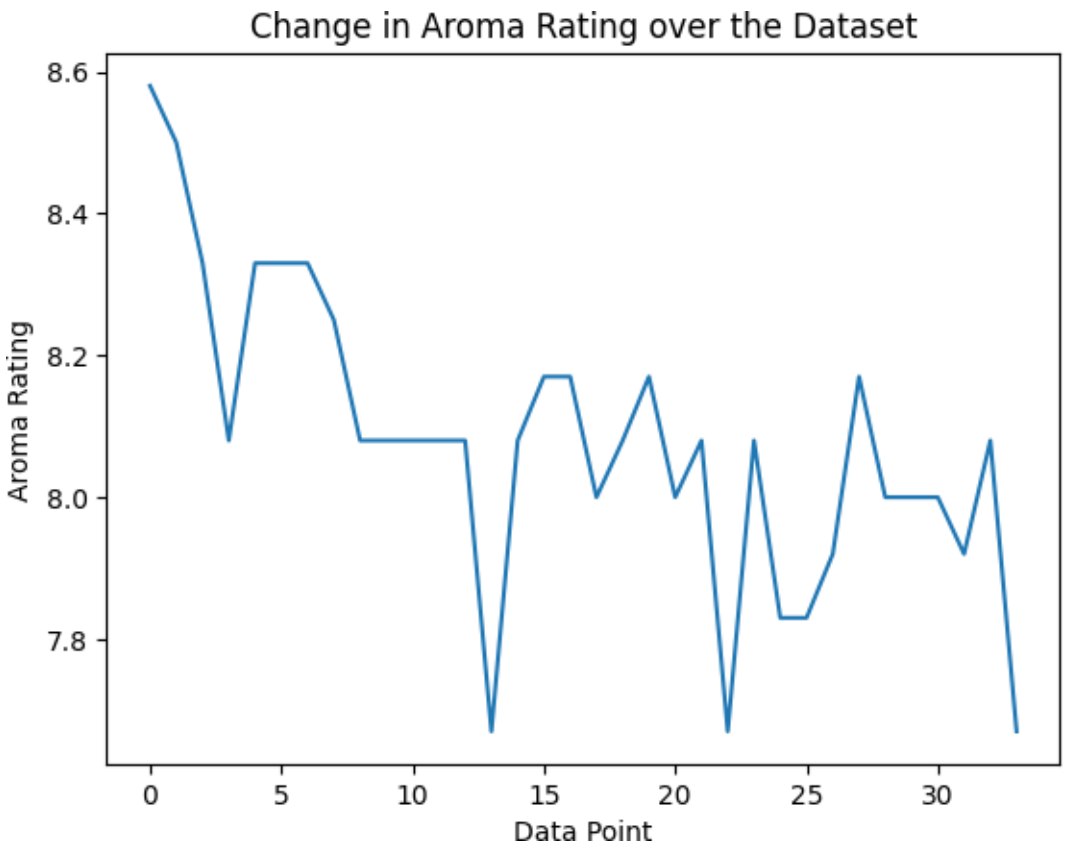
Roll No :- 146

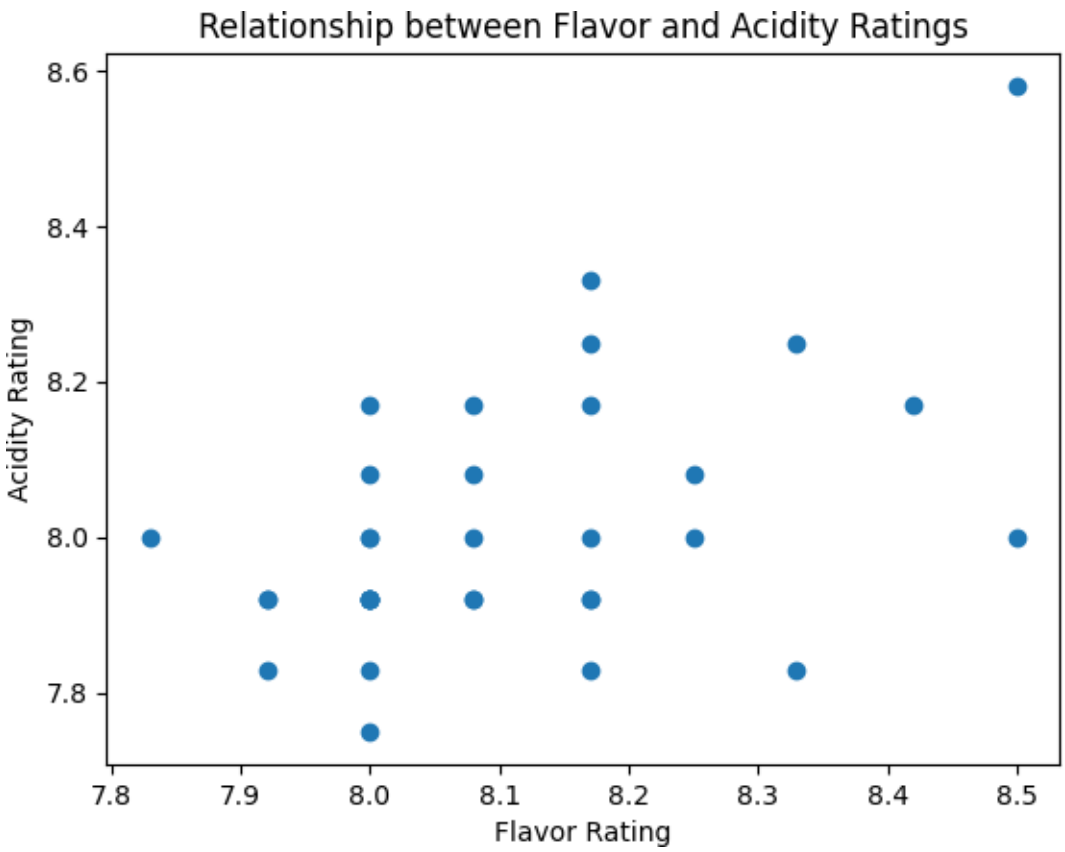
Division:- A Batch :- A3

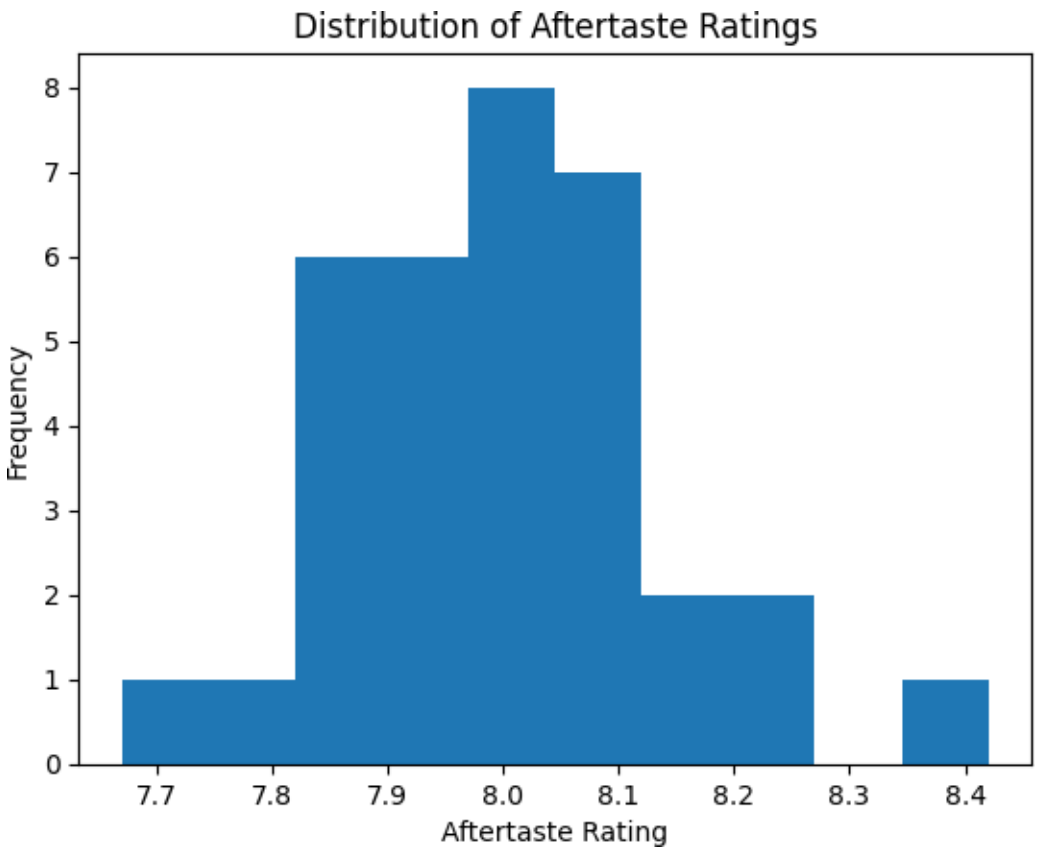
[ ]:
```
import pandas as pd
import matplotlib.pyplot as plt

# Read the CSV file into a pandas DataFrame
data = pd.read_csv('/content/coffee.csv')

# . Bar Chart - Number of bags for each country of origin
country_bags = data.groupby('Country of Origin')['Number of Bags'].sum()
plt.bar(country_bags.index, country_bags.values)
plt.xlabel('Country of Origin')
plt.ylabel('Number of Bags')
plt.title('Number of Bags for each Country of Origin')
plt.xticks(rotation=45)
plt.show()



# . Line Chart - Change in aroma rating over the dataset
plt.plot(data['Aroma'])
plt.xlabel('Data Point')
plt.ylabel('Aroma Rating')
plt.title('Change in Aroma Rating over the Dataset')
plt.show()

# . Scatter Plot - Relationship between flavor and acidity ratings
plt.scatter(data['Flavor'], data['Acidity'])
plt.xlabel('Flavor Rating')
plt.ylabel('Acidity Rating')
plt.title('Relationship between Flavor and Acidity Ratings')
plt.show()

# . Histogram - Distribution of aftertaste ratings
plt.hist(data['Aftertaste'], bins=10)
plt.xlabel('Aftertaste Rating')
plt.ylabel('Frequency')
plt.title('Distribution of Aftertaste Ratings')
plt.show()
```

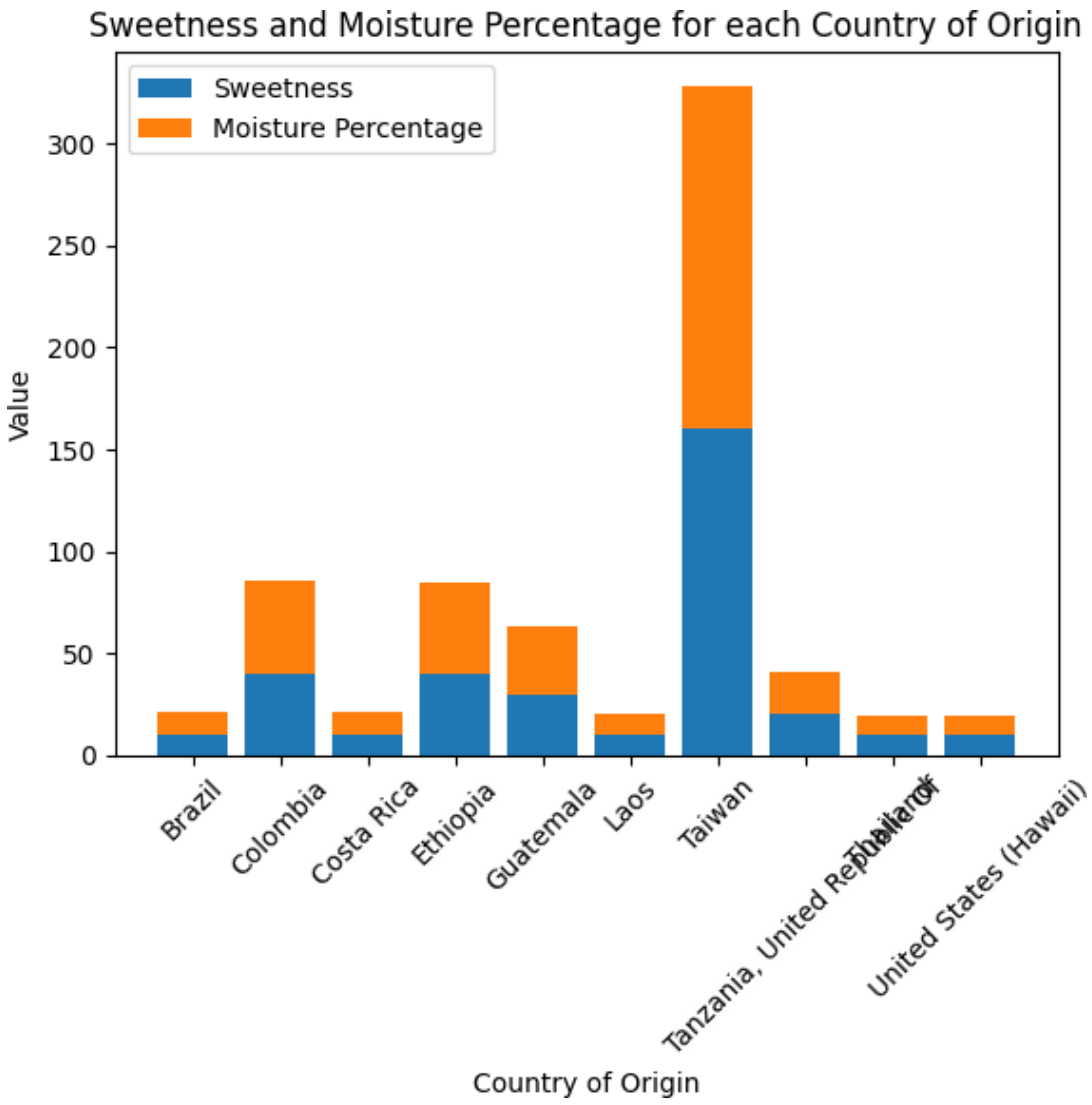
```
# . Stacked Bar Chart - Sweetness and moisture percentage for each country of origin
sweetness = data.groupby('Country of Origin')['Sweetness'].sum()
moisture = data.groupby('Country of Origin')['Moisture Percentage'].sum()
plt.bar(sweetness.index, sweetness.values, label='Sweetness')
plt.bar(moisture.index, moisture.values, bottom=sweetness.values, label='Moisture Percentage')
plt.xlabel('Country of Origin')
plt.ylabel('Value')
plt.title('Sweetness and Moisture Percentage for each Country of Origin')
plt.xticks(rotation=45)
plt.legend()
plt.show()
```


Number of Bags for each Country of Origin
Number of Bags
0
100
200
300
400
500
Brazil
Colombia
Costa Rica
Ethiopia
Guatemala
Laos
Taiwan
United States (Hawaii)
Country of Origin


Change in Aroma Rating over the Dataset
Aroma Rating
8.6
8.4
8.2
8.0
7.8
0
5
10
15
20
25
30
Data Point


Relationship between Flavor and Acidity Ratings
Acidity Rating
Flavor Rating
8.6
8.4
8.2
8.0
7.8
7.8
7.9
8.0
8.1
8.2
8.3
8.4
8.5


Distribution of Aftertaste Ratings
Frequency
0
1
2
3
4
5
6
7
8
7.7
7.8
7.9
8.0
8.1
8.2
8.3
8.4
Aftertaste Rating


Sweetness and Moisture Percentage for each Country of Origin
Sweetness
Moisture Percentage
Value
0
50
100
150
200
250
300
Brazil
Colombia
Costa Rica
Ethiopia
Guatemala
Laos
Taiwan
United States (Hawaii)
Country of Origin

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