assignment5-eds

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[ ]:

**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

.

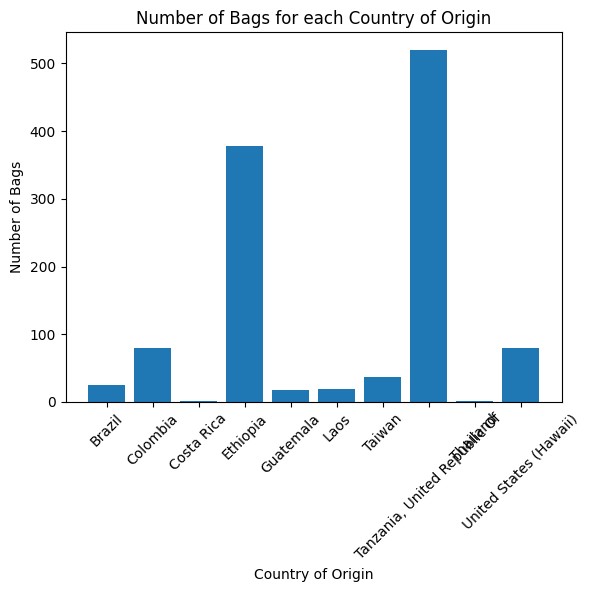
show()

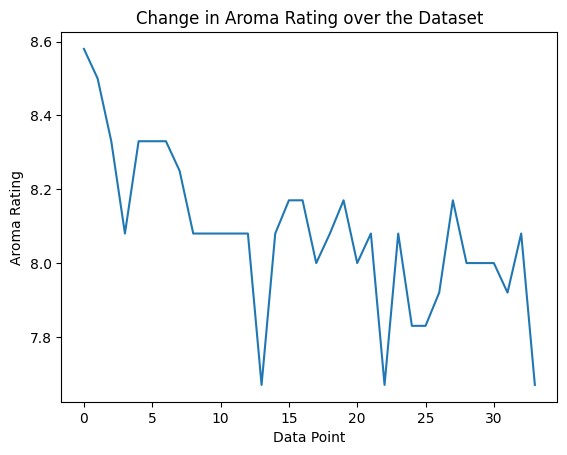
*# . Stacked Bar Chart - Sweetness and moisture percentage for each country of*␣

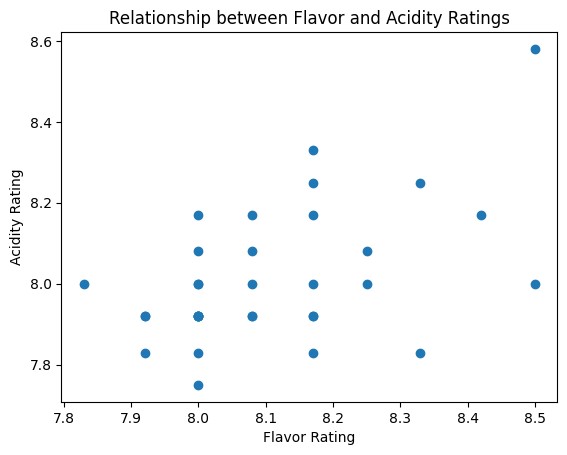
↪*origin* sweetness = data.groupby('Country of Origin')['Sweetness'].sum() moisture = data.groupby('Country of Origin')['Moisture Percentage'].sum() plt.bar(sweetness.index, sweetness.values, label='Sweetness') plt.bar(moisture.index, moisture.values, bottom=sweetness.values,␣

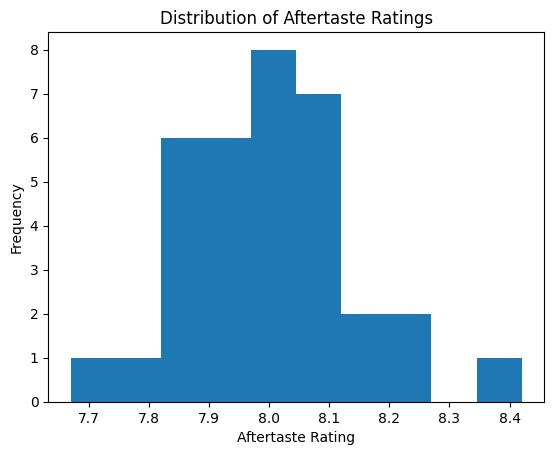
↪label='Moisture Percentage') plt.xlabel('Country of Origin')

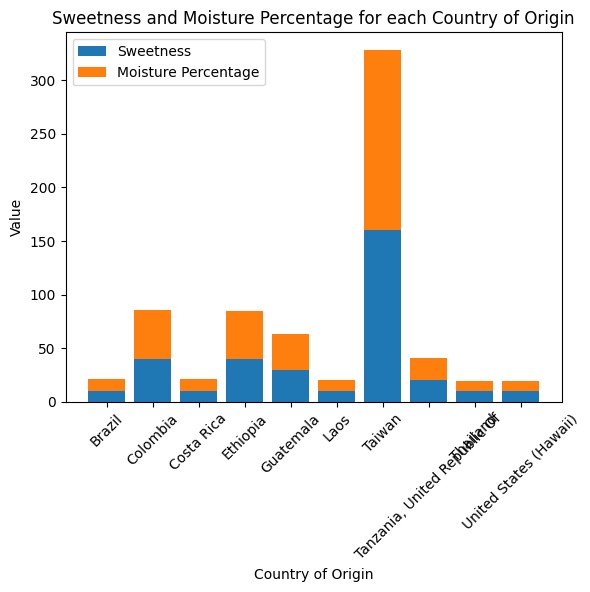
plt.ylabel('Value') plt.title('Sweetness and Moisture Percentage for each Country of Origin') plt.xticks(rotation=45) plt.legend() plt.show()











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