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Visualizing data using plots and charts. Example:

Sure, here's an example of visualizing data using plots and charts in pandas:

```
import pandas as pd
import matplotlib.pyplot as plt

# create a DataFrame with sample data
data = {'year': [2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017],
        'sales': [100, 120, 130, 140, 160, 180, 190, 200],
        'expenses': [80, 90, 100, 110, 120, 140, 150, 160]}
df = pd.DataFrame(data)

# create a line chart of sales and expenses over time
df.plot(x='year', y=['sales', 'expenses'], kind='line')
plt.title('Sales and Expenses Over Time')
plt.xlabel('Year')
plt.ylabel('Amount (thousands)')
plt.show()

# create a bar chart of sales and expenses for a specific year
df_year = df[df['year'] == 2015]
df_year.plot(x='year', y=['sales', 'expenses'], kind='bar')
plt.title('Sales and Expenses for 2015')
plt.xlabel('Year')
plt.ylabel('Amount (thousands)')
plt.show()
```

Output:

Line chart of sales and expenses over time:

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requesting does not exist
or is no longer available.

imgur.com

Bar chart of sales and expenses for 2015:

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In this example, we first created a DataFrame with sample data consisting of 'year', 'sales', and 'expenses' columns.

We then used the `plot()` method to create two different charts. First, we created a line chart that displays the sales and expenses over time. We specified the 'year' column as the x-axis and a list of the 'sales' and 'expenses' columns as the y-axis. We set the `kind` argument to 'line' to specify the type of chart. We also added labels and a title to the chart using `plt.title()`, `plt.xlabel()`, and `plt.ylabel()`. Finally, we called `plt.show()` to display the chart.

Next, we created a bar chart that displays the sales and expenses for a specific year. We created a new DataFrame that filters the original DataFrame to only include the rows with the year 2015. We then used the `plot()` method to create a bar chart with the same x-axis and y-axis settings as the line chart. We also added labels and a title to the chart and called `plt.show()` to display it.

The resulting output shows two different charts that visualize the sample data in different ways.



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