**Week 6 Assignment: Data Visualization**

**Plotting temperatures**

**Part 1**

Load the Helsinki temperature data from the file  **helsinki-vantaa.txt**.

* Read the data into a variable called data using pandas
* Parse the dates from the column 'DATE' and set the dates as the index in the DataFrame

Enter your code here:

|  |
| --- |
|  |

#Enter the output for a test print of the first five rows  
print(data**.**head())

|  |
| --- |
|  |

*# Check the number of rows in the data frame*

print(len(data))

|  |
| --- |
| 706 |

**Part 2**

Select data for the 30-year period (January 1988 to December 2018).

* *Store the selection in a new variable****selection***
* *Enter your code here:*

|  |
| --- |
|  |

* *#Enter the output for a test print of the following*  
  selection.head()

|  |
| --- |
|  |

* *# Check the number of rows, enter output below*
* print(f'Number of rows: {len(selection)}')

|  |
| --- |
| Number of rows: 372 |

**Part 3**

#### Part 3.1

Create a line plot that displays the temperatures (TEMP\_C) for each month in the 30-year time period with the following format:

* Set the figure size
  + Create a figure object and use the figsize parameter.
  + The example figure uses figsize=(14,6) (you can experiment with other figure sizes if you like!)
* Adjust the line style
  + solid line
  + black color
  + round markers
* Add a title and axis labels
  + Title: 'Helsinki-Vantaa Airport'
  + X-label: 'Time'
  + Y-label: 'Temperature (Celsius)'

#### Part 3.2

Save your figure as PNG file called temp\_line\_plot.png.

Enter all code below for Part 3.1 below and cut and paste your png file on the following page.

|  |
| --- |
| fig, ax = plt.subplots()  selection.plot(kind='line', y=["TEMP\_C"], ax=ax, style='-ok')  fig.set\_size\_inches(14, 6)  plt.ylabel("Temperature (Celsius)")  plt.xlabel("Time")  plt.xticks(rotation=45)  plt.title("Helsinki-Vantaa Airport")  plt.show() |

Cut and paste your temp\_line\_plot.png below:

A graph showing a graph of a graph

Description automatically generated with medium confidence