```
1 pip install nbconvert
2
```

Requirement already satisfied: nbconvert in /usr/local/lib/python3.10/dist-packages (6.5.4) Requirement already satisfied: lxml in /usr/local/lib/python3.10/dist-packages (from nbconvert) (4.9.4) Requirement already satisfied: beautifulsoup4 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (4.1 Requirement already satisfied: bleach in /usr/local/lib/python3.10/dist-packages (from nbconvert) (6.1.0) Requirement already satisfied: defusedxml in /usr/local/lib/python3.10/dist-packages (from nbconvert) (0.7.1) Requirement already satisfied: entrypoints>=0.2.2 in /usr/local/lib/python3.10/dist-packages (from nbconvert) Requirement already satisfied: jinja2>=3.0 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (3.1.4) Requirement already satisfied: jupyter-core>=4.7 in /usr/local/lib/python3.10/dist-packages (from nbconvert) ( Requirement already satisfied: jupyterlab-pygments in /usr/local/lib/python3.10/dist-packages (from nbconvert) Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (2. Requirement already satisfied: mistune<2,>=0.8.1 in /usr/local/lib/python3.10/dist-packages (from nbconvert) ( Requirement already satisfied: nbclient>=0.5.0 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (0. Requirement already satisfied: nbformat>=5.1 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (5.10 Requirement already satisfied: packaging in /usr/local/lib/python3.10/dist-packages (from nbconvert) (24.0) Requirement already satisfied: pandocfilters>=1.4.1 in /usr/local/lib/python3.10/dist-packages (from nbconvert Requirement already satisfied: pygments>=2.4.1 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (2. Requirement already satisfied: tinycss2 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (1.3.0) Requirement already satisfied: traitlets>=5.0 in /usr/local/lib/python3.10/dist-packages (from nbconvert) (5.7 Requirement already satisfied: platformdirs>=2.5 in /usr/local/lib/python3.10/dist-packages (from jupyter-core Requirement already satisfied: jupyter-client>=6.1.12 in /usr/local/lib/python3.10/dist-packages (from nbclien Requirement already satisfied: fastjsonschema>=2.15 in /usr/local/lib/python3.10/dist-packages (from nbformat> Requirement already satisfied: jsonschema>=2.6 in /usr/local/lib/python3.10/dist-packages (from nbformat>=5.1-Requirement already satisfied: soupsieve>1.2 in /usr/local/lib/python3.10/dist-packages (from beautifulsoup4-> Requirement already satisfied: six>=1.9.0 in /usr/local/lib/python3.10/dist-packages (from bleach->nbconvert) Requirement already satisfied: webencodings in /usr/local/lib/python3.10/dist-packages (from bleach->nbconvert Requirement already satisfied: attrs>=22.2.0 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=2.6-Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /usr/local/lib/python3.10/dist-packages Requirement already satisfied: referencing>=0.28.4 in /usr/local/lib/python3.10/dist-packages (from jsonschema Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=2.6 Requirement already satisfied: pyzmq>=13 in /usr/local/lib/python3.10/dist-packages (from jupyter-client>=6.1. Requirement already satisfied: python-dateutil>=2.1 in /usr/local/lib/python3.10/dist-packages (from jupyter-c Requirement already satisfied: tornado>=4.1 in /usr/local/lib/python3.10/dist-packages (from jupyter-client>=6

```
pd.read_csv("/content/drive/MyDrive/2-STORYTELLING/PROJECTS/project_3/Furto_celular_2022.csv",
sep=';')
```

NameError: name 'pd' is not defined

Next steps: Explain error



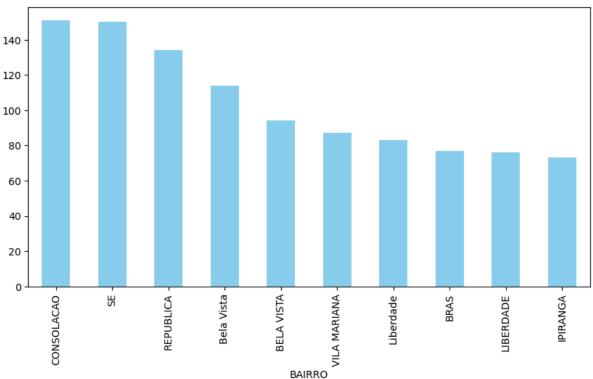
```
5/19/24, 10:57 PM
                                                              project3.ipynb - Colab
    1
    2 # Este código cria um gráfico de barras animado que atualiza a cada
    3 # segundo. A função animate é chamada a cada frame da animação.
    4 # Ela limpa o gráfico atual e desenha um novo gráfico de barras.
    5 # As barras são coloridas de azul claro, têm uma largura de 0.5 e os
    6 # rótulos de dados são adicionados no topo de cada barra.
    7 # A animação dura 10 segundos (10 frames com um intervalo de 1 segundo
    8 # entre cada frame).
   10
   11 import pandas as pd
   12 import matplotlib.pyplot as plt
   13 import matplotlib.animation as animation
   14
   15 # Carregar o dataset
   16 df = pd.read_csv("/content/drive/MyDrive/2-STORYTELLING/PROJECTS/project_3/Furto_celular_2022.csv",
   17
                       sep=';')
   18
   19 # Remover linhas com dados faltantes nas colunas de interesse
   20 df = df.dropna(subset=['BAIRRO', 'CIDADE', 'UF', 'QUANT_CELULAR'])
   21
   22 # Filtrar apenas as capitais
   23 #capitais = ['Rio Branco', 'Maceió', 'Macapá', 'Manaus', 'Salvador', 'Fortaleza', 'Brasília', 'Vitória', 'Goiâr
   24 #df = df[df['CIDADE'].isin(capitais)]
   26
   27
   28
        <ipython-input-6-0a36c809c1fd>:15: DtypeWarning: Columns (27,38) have mixed types. Specify dtype option on imp
          df = pd.read_csv("/content/drive/MyDrive/2-STORYTELLING/PROJECTS/project_3/Furto_celular_2022.csv",
    1 Start coding or generate with AI.
    1 df = df[df['CIDADE'] == 'S.PAULO']
    1 # Agregar os dados por bairro
    2 df_agg = df.groupby('BAIRRO')['QUANT_CELULAR'].sum().sort_values(
          ascending=False)
    1 df_agg
    ⇒ BAIRRO
```

```
CONSOLACAO
                           151.0
                           150.0
SF
REPUBLICA
                           134.0
Bela Vista
                           114.0
BELA VISTA
                            94.0
São João Climaco
                             1.0
Jardim Ibitirama
                             1.0
Parque Monteiro Soares
                             1.0
Jardim Japao
                             1.0
PERUS
                             1.0
Name: QUANT_CELULAR, Length: 355, dtype: float64
```

```
1 # Gerar o gráfico
  fig, ax = plt.subplots(figsize=(10, 5))
2
3
   df_agg.head(10).plot(kind='bar', ax=ax, color='skyblue', width=0.5)
```



<- <Axes: xlabel='BAIRR0'>



```
1
 2 # Gerar o gráfico
 3 fig, ax = plt.subplots(figsize=(10, 5))
 5 def animate(i):
 6
      ax.clear()
      df_agg.head(10).plot(kind='bar', ax=ax, color='skyblue', width=0.5)
      plt.title('Top 10 Bairros com Maior Número de Furtos de Celulares')
 8
      plt.xlabel('Bairro')
9
10
      plt.ylabel('Número de Furtos')
11
      plt.xticks(fontsize=14)
12
      for i, v in enumerate(df_{agg.head(10).values}):
13
           ax.text(i, v + 0.2, int(v), ha='center', va='bottom', fontsize=10)
14
16 ani = animation.FuncAnimation(fig, animate, frames=10, interval=1000, repeat=False)
17
18 plt.show()
```



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```
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```
1 !jupyter nbconvert --to html seu_arquivo.ipynb
```

[NbConvertApp] WARNING | pattern 'seu\_arquivo.ipynb' matched no files
This application is used to convert notebook files (\*.ipynb)
to various other formats.

WARNING: THE COMMANDLINE INTERFACE MAY CHANGE IN FUTURE RELEASES.

```
Options
```

```
The options below are convenience aliases to configurable class-options,
as listed in the "Equivalent to" description—line of the aliases.
To see all configurable class-options for some <cmd>, use:
   <cmd> --help-all
--debug
   set log level to logging.DEBUG (maximize logging output)
   Equivalent to: [--Application.log_level=10]
   Show the application's configuration (human-readable format)
   Equivalent to: [--Application.show_config=True]
--show-config-json
   Show the application's configuration (json format)
   Equivalent to: [--Application.show_config_json=True]
--generate-config
   generate default config file
   Equivalent to: [--JupyterApp.generate_config=True]
   Answer yes to any questions instead of prompting.
   Equivalent to: [--JupyterApp.answer_yes=True]
--execute
   Execute the notebook prior to export.
   Equivalent to: [--ExecutePreprocessor.enabled=True]
--allow-errors
```

Continue notebook execution even if one of the cells throws an error and include the error message in the Equivalent to: [--ExecutePreprocessor.allow\_errors=True]

--stdin

read a single notebook file from stdin. Write the resulting notebook with default basename 'notebook.\*' Equivalent to: [--NbConvertApp.from\_stdin=True]

--stdout

Write notebook output to stdout instead of files.