

PROCESAMIENTO DE DATOS

API 4

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Consigna 1

Instalar la librería de python tk y la librería matplotlib. Luego dejar una captura de pantalla de las 2 herramientas instaladas. (Sugerencia capturar la ventanita de tk, para esto revisar comando tkinter).

```
✓ 8.0s

Defaulting to user installation because normal site-packages is not writeable
Collecting tk
  Downloading tk-0.1.0-py3-none-any.whl (3.9 kB)
Installing collected packages: tk
Successfully installed tk-0.1.0
WARNING: You are using pip version 21.2.4; however, version 24.1.2 is available.
You should consider upgrading via the '/Library/Developer/CommandLineTools/usr/bin/python3 -m pip install --upgrade pip' command.
Defaulting to user installation because normal site-packages is not writeable
Collecting matplotlib
  Downloading matplotlib-3.9.1-cp39-cp39-macosx_11_0_arm64.whl (7.8 MB)
    | 7.8 MB 4.0 MB/s eta 0:00:01
Collecting kiwisolver>=1.3.1
  Downloading kiwisolver-1.4.5-cp39-cp39-macosx_11_0_arm64.whl (66 kB)
    | 66 kB 10.0 MB/s eta 0:00:01
Collecting pillow>=8
  Downloading pillow-10.4.0-cp39-cp39-macosx_11_0_arm64.whl (3.4 MB)
    | 3.4 MB 31.7 MB/s eta 0:00:01
Collecting cyclar>=0.10
  Downloading cyclar-0.12.1-py3-none-any.whl (8.3 kB)
Collecting contourpy>=1.0.1
  Downloading contourpy-1.2.1-cp39-cp39-macosx_11_0_arm64.whl (244 kB)
    | 244 kB 62.8 MB/s eta 0:00:01
Requirement already satisfied: packaging>=20.0 in /Users/jlorenotomasdiez/Library/Python/3.9/lib/python/site-packages (from matplotlib) (24.0)
Requirement already satisfied: numpy>=1.23 in /Users/jlorenotomasdiez/Library/Python/3.9/lib/python/site-packages (from matplotlib) (1.26.4)
Collecting fonttools>=4.22.0
  ...
Installing collected packages: pyparsing, pillow, kiwisolver, importlib-resources, fonttools, cyclar, contourpy, matplotlib
Successfully installed contourpy-1.2.1 cyclar-0.12.1 fonttools-4.53.1 importlib-resources-6.4.0 kiwisolver-1.4.5 matplotlib-3.9.1 pillow-10.4.0 pyparsing-3.1.2
WARNING: You are using pip version 21.2.4; however, version 24.1.2 is available.
You should consider upgrading via the '/Library/Developer/CommandLineTools/usr/bin/python3 -m pip install --upgrade pip' command.
Output is truncated. View as a scrollable element or open in a text editor. Adjust cell output settings...
```

Se ha interrumpido el kernel "Python 3.12.3". Haga clic aquí para reiniciarlo.

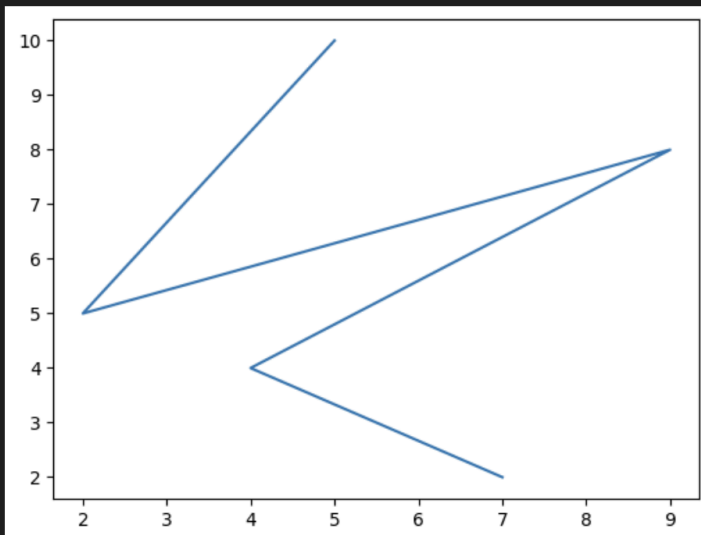
Consigna 2

Ejecutar el siguiente ejercicio y colocar la captura de pantalla de la gráfica que generó.

```
✓ 13.7s

import matplotlib.pyplot as plt
x = [5, 2, 9, 4, 7]
y = [10, 5, 8, 4, 2]
plt.plot(x, y)
plt.show()
```

Matplotlib is building the font cache; this may take a moment.

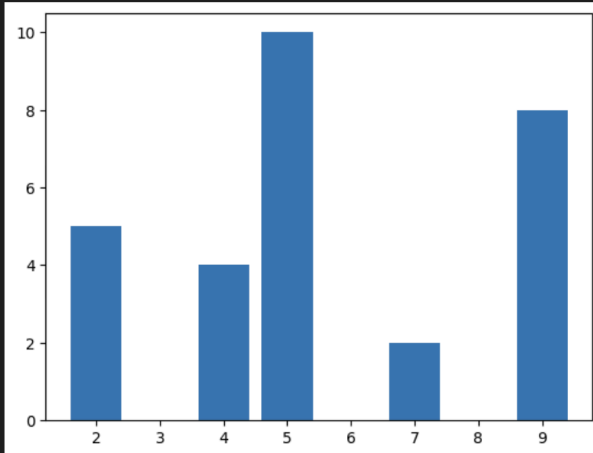


Consigna 3

De una gráfica, generar el ejercicio necesario para obtenerlo, se deja ejemplo de cómo sería el código, rellenar lo necesario:

```
from matplotlib import pyplot as plt
x = [2, 3, 4, 5, 6, 7, 8, 9]
y = [5, 0, 4, 10, 0, 2, 0, 8]
# buscar función para el tipo de gráfico de barras plt.EJEMPLO(x, y)
plt.bar(x, y)
plt.show()
```

[3] ✓ 0.0s



Consigna 4

Ejecutar el siguiente ejercicio, compartir una captura de pantalla, cambiando el título y modificando cantidades de frutas.

```
import matplotlib.pyplot as plt
data = {'rosas': 5, 'calas': 4, 'manzanillas': 3, 'lotos': 2}
Nombres= list(data.keys())
Valores= list(data.values())
fig, axs = plt.subplots(1, 3, figsize=(9, 3), sharey=True)
axs[0].bar(Nombres, Valores)
axs[1].scatter(Nombres, Valores)
axs[2].plot(Nombres, Valores)
fig.suptitle('Cant. x Tipo')
plt.show()
```

[6] ✓ 0.0s

