```
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```
import pandas as pd  # Import pandas

# Specify the file path
file_path = '/content/drive/My Drive/TotalCasas/Total-Casas.xlsx'

# Read the Excel file
data = pd.read_excel(file_path)

# Display the first few rows of the data
print(data.head())
```

```
       Segmento Desarrollador              Proyecto Prototipo Categoría  \
0  Residencial     Acrópolis               Mykonos         B     2N 3R
1  Residencial        Lujamí                 Mattía     Baham     2N 3R
2  Residencial       Imperio   Robles Juriquilla I    Acacia     2N 3R
3  Residencial       Imperio  Robles Juriquilla II    Acacia     2N 3R
4  Residencial       Imperio   Robles Juriquilla I     Maple     2N 3R

  Tipo de Unidad  Terreno (m2 T)  Construcción (m2 C)  m2 C / m2 T    $ Lista  \
0     2N 3R 2.5B           93.00               109.32     1.175484  2160500.0
1     2N 3R 2.5B          110.00               123.12     1.119273  2730000.0
2   2N 3R E 2.5B          108.89               122.54     1.125356  2750000.0
3   2N 3R E 2.5B          108.89               122.54     1.125356  2750000.0
4     2N 3R 2.5B          108.89               126.73     1.163835  2800000.0

   ...  Total Unidades  Ventas  Inventario  Abs. Hist  (U / Mes)  \
0  ...              47      35          12              1.166027
1  ...              25      22           3              0.439663
2  ...              24      17           7              0.849069
3  ...               8       1           7              0.498634
4  ...              18      13           5              0.649288

   Part. Mercado (%)  Avance Ventas (%)  Ritmo Ventas (%)  \
0           0.036207           0.744681          0.024809
1           0.013652           0.880000          0.017587
2           0.026365           0.708333          0.035378
3           0.015483           0.125000          0.062329
4           0.020162           0.722222          0.036072

   Vigencia Inventario (Meses) Antigüedad (Meses)  Fecha Inicio
0                    10.291353          30.016445    2021-06-01
1                     6.823414          50.038367    2019-10-01
2                     8.244321          20.021922    2022-04-01
3                    14.038359           2.005480    2023-10-01
4                     7.700739          20.021922    2022-04-01

[5 rows x 21 columns]
```

```
!pip install seaborn
```

```
Requirement already satisfied: seaborn in /usr/local/lib/python3.11/dist-packages (0.13.2)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in /usr/local/lib/python3.11/dist-packages (from seaborn) (1.26.4)
Requirement already satisfied: pandas>=1.2 in /usr/local/lib/python3.11/dist-packages (from seaborn) (2.2.2)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in /usr/local/lib/python3.11/dist-packages (from seaborn) (3.10.0)
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.3.
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (4.5
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.4
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (24.2)
Requirement already satisfied: pillow>=8 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (11.1.0)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (3.2.
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.11/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas>=1.2->seaborn) (2025.1)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas>=1.2->seaborn) (2025.1)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.4->
```

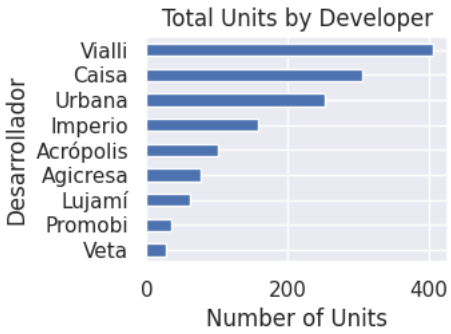
```
# Create dashboard-Characteristics
import matplotlib.pyplot as plt
import seaborn as sns

# Apply Seaborn's default style
sns.set_theme()
```

```
fig = plt.figure(figsize=(30, 50))
```

```
<Figure size 3000x5000 with 0 Axes>
```

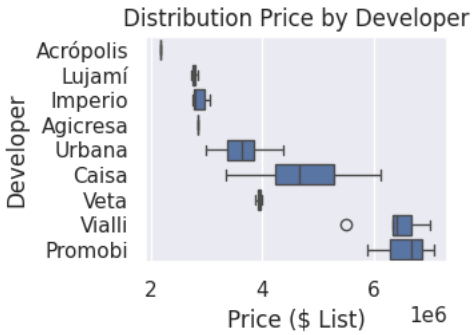
```
plt.subplot(2, 2, 1)
# Replace 'df' with 'data'
developer_units = data.groupby('Desarrollador')['Total Unidades'].sum().sort_values(ascending=True)
developer_units.plot(kind='barh')
plt.title('Total Units by Developer')
plt.xlabel('Number of Units')
```

```
Text(0.5, 0, 'Number of Units')
```



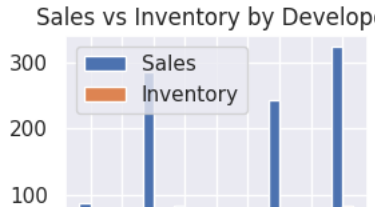

```
# 2. Price Distribution
plt.subplot(2, 2, 2)
sns.boxplot(y='Desarrollador', x='$ Lista', data=data)  # Change df to data
plt.title('Distribution Price by Developer')
plt.ylabel('Developer')
plt.xlabel('Price ($ List)')
```

```
Text(0.5, 0, 'Price ($ List)')
```

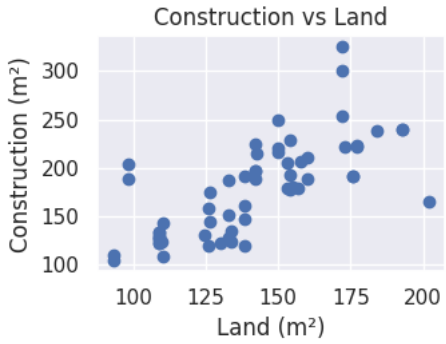



```
# 3. Sales vs Inventory
plt.subplot(2, 2, 3)
# Replace 'df' with 'data' to use the DataFrame loaded earlier
df_summary = data.groupby('Desarrollador').agg({
    'Ventas': 'sum',
    'Inventario': 'sum'
}).reset_index()

x = range(len(df_summary['Desarrollador']))
width = 0.35

plt.bar(x, df_summary['Ventas'], width=width, label='Sales')
plt.bar([i + width for i in x], df_summary['Inventario'], width, label='Inventory')
plt.xticks([i + width/2 for i in x], df_summary['Desarrollador'], rotation=45)
plt.legend()
plt.title('Sales vs Inventory by Developer')
```

```
Text(0.5, 1.0, 'Sales vs Inventory by Developer')
```




```
# 4. Construction vs Land Area
plt.subplot(2, 2, 4)
# Replace 'df' with 'data' to access the correct DataFrame
plt.scatter(data['Terreno (m2 T)'], data['Construcción (m2 C)'])
plt.xlabel('Land (m²)')
plt.ylabel('Construction (m²)')
plt.title('Construction vs Land')


plt.tight_layout()
plt.show()
```




```
print('\
Statistics:')
print('Total de Projectos:', len(data))  # Change df to data
print('Average Precio:', data['$ Lista'].mean())  # Change df to data
print('Total Unidades:', data['Total Unidades'].sum())  # Change df to data
print('Total Ventas:', data['Ventas'].sum())  # Change df to data
print('Total Inventario:', data['Inventario'].sum())  # Change df to data
```

```
Statistics:
Total de Projectos: 60
Average Precio: 4352872.742857143
Total Unidades: 1428
Total Ventas: 1186
Total Inventario: 242
```