

```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

Convertir a dataframe

```
In [5]: df = pd.read_csv("Iris.csv")
df
```

```
Out[5]:
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa
...
145	146	6.7	3.0	5.2	2.3	Iris-virginica
146	147	6.3	2.5	5.0	1.9	Iris-virginica
147	148	6.5	3.0	5.2	2.0	Iris-virginica
148	149	6.2	3.4	5.4	2.3	Iris-virginica
149	150	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 6 columns

GRÁFICO CON PANDAS - PÉTALO

```
In [8]: # Gráfico Pétalo - Longitud vs Ancho

figura = df[df.Species == "Iris-setosa"].plot(kind="scatter", x="PetalLengthCm", y = "PetalWidthCm",
color="blue", label='Setosa', figsize=(6.4, 6.4))

df[df.Species == "Iris-versicolor"].plot(kind="scatter", x="PetalLengthCm", y = "PetalWidthCm",
color="orange", label='Versicolor', ax=figura)

df[df.Species == "Iris-virginica"].plot(kind="scatter", x="PetalLengthCm", y = "PetalWidthCm",
color="green", label='Virginica', ax=figura)

figura.set_xlabel("Longitud")
figura.set_ylabel("Anchura")
figura.set_title("Gráfica para el Pétalo - con Pandas")
plt.show()
```

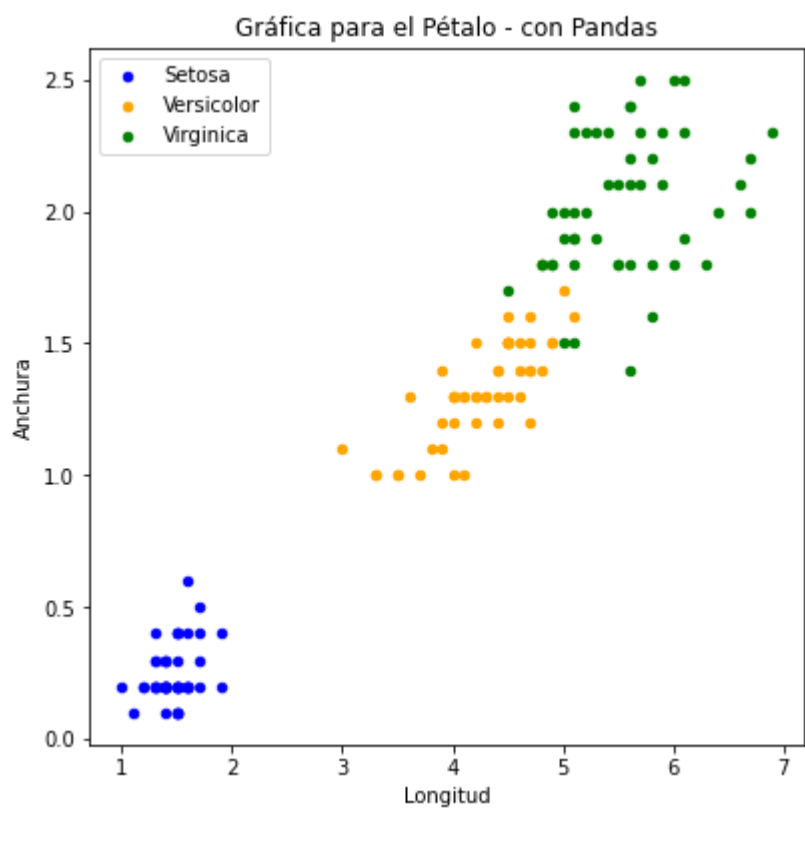


GRÁFICO CON MATPLOTLIB - PÉTALO

```
In [10]: df_set = df[df.Species == "Iris-setosa"]
df_ver = df[df.Species == "Iris-versicolor"]
df_vir = df[df.Species == "Iris-virginica"]

fig = plt.figure(figsize=(6.4, 6.4))
ax1= fig.add_subplot(111)
ax1.scatter(df_set["PetalLengthCm"], df_set["PetalWidthCm"], s=10, c="blue", label="Setosa")
ax1.scatter(df_ver["PetalLengthCm"], df_ver["PetalWidthCm"], s=10, c="orange", label="Versicolor")
ax1.scatter(df_vir["PetalLengthCm"], df_vir["PetalWidthCm"], s=10, c="green", label="Virginica")

plt.legend(loc="upper left")
plt.title("Gráfica para el Pétalo - con Matplotlib")
plt.xlabel("Longitud")
plt.ylabel("Anchura")
plt.show()
```

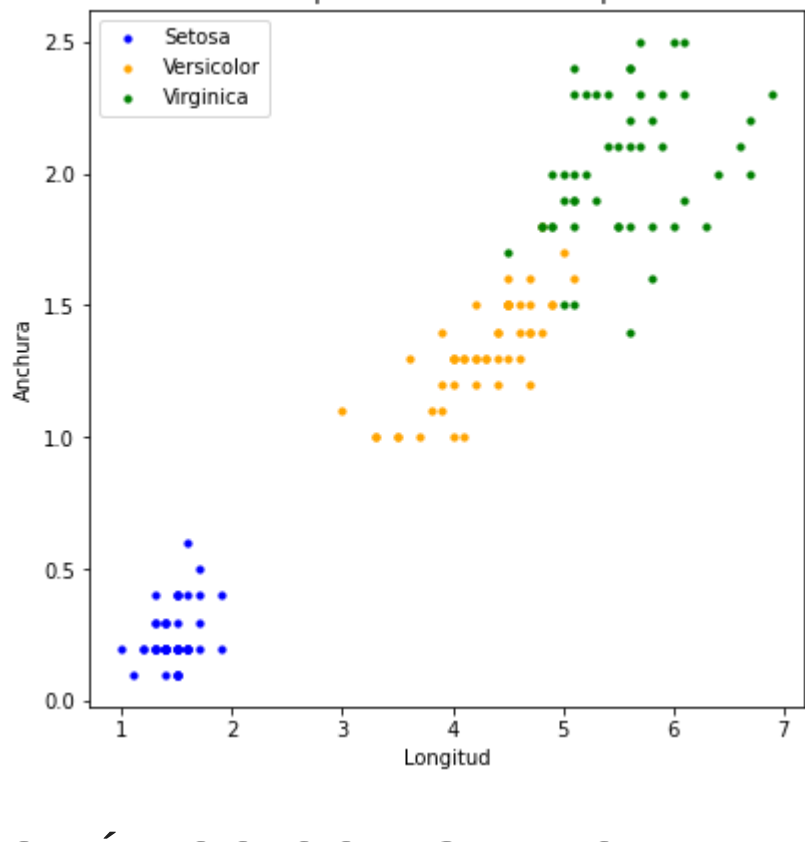


GRÁFICO CON SEABORN - PÉTALO

```
In [12]: # pip install seaborn

sns.FacetGrid(df, hue="Species", height=6.4)\
.map(plt.scatter, "PetalLengthCm", "PetalWidthCm")\
.add_legend()

plt.title("Gráfica para el Pétalo - con Seaborn")
plt.show()
```

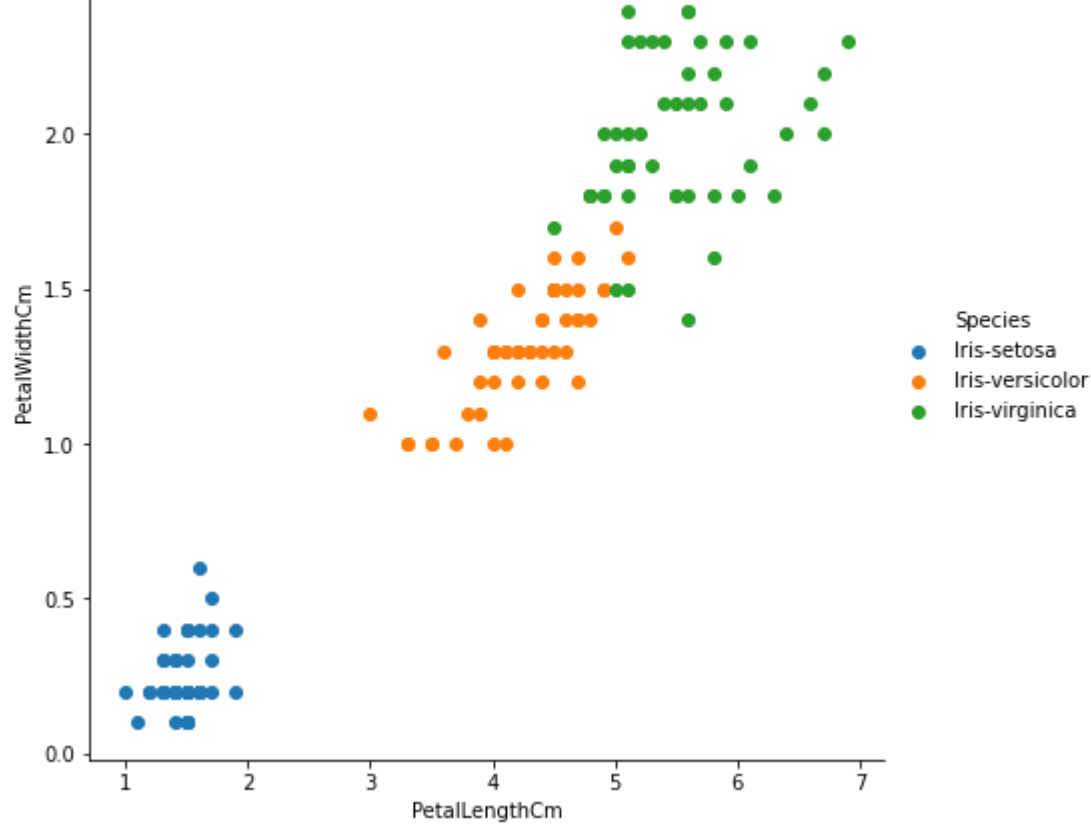


GRÁFICO CON PANDAS - SÉPALO

```
In [13]: # Gráfico Pétalo - Longitud vs Ancho

figura = df[df.Species == "Iris-setosa"].plot(kind="scatter", x="SepalLengthCm", y = "SepalWidthCm",
color="blue", label='Setosa', figsize=(6.4, 6.4))

df[df.Species == "Iris-versicolor"].plot(kind="scatter", x="SepalLengthCm", y = "SepalWidthCm",
color="orange", label='Versicolor', ax=figura)

df[df.Species == "Iris-virginica"].plot(kind="scatter", x="SepalLengthCm", y = "SepalWidthCm",
color="green", label='Virginica', ax=figura)

figura.set_xlabel("Longitud")
figura.set_ylabel("Anchura")
figura.set_title("Gráfica para el Sépalo - con Pandas")
plt.show()
```

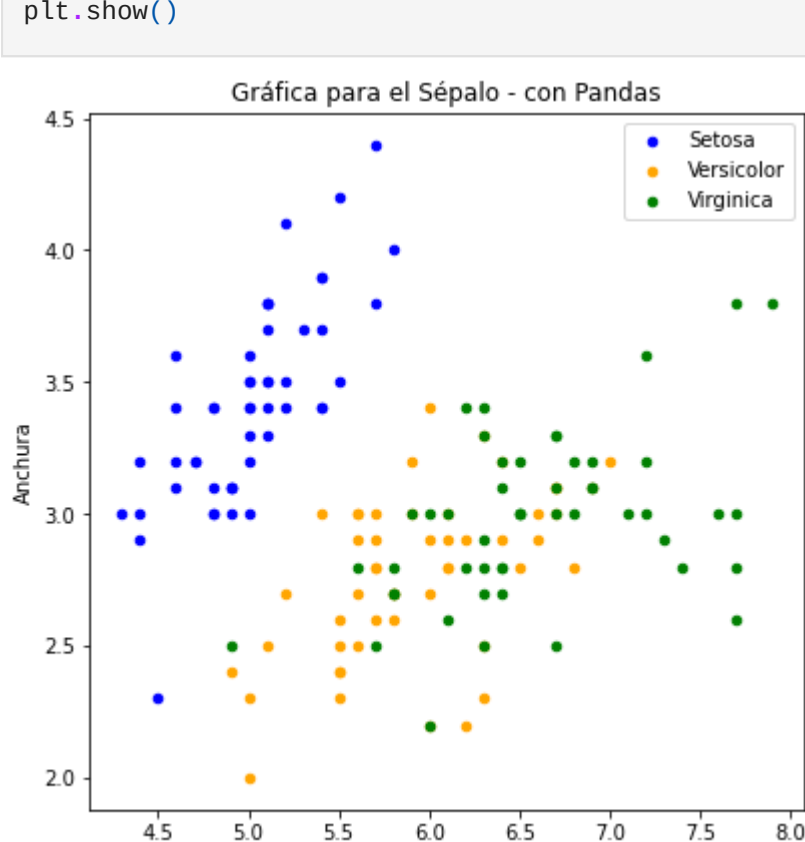


GRÁFICO CON MATPLOTLIB - SÉPALO

```
In [14]: df_set = df[df.Species == "Iris-setosa"]
df_ver = df[df.Species == "Iris-versicolor"]
df_vir = df[df.Species == "Iris-virginica"]

fig = plt.figure(figsize=(6.4, 6.4))
ax1= fig.add_subplot(111)
ax1.scatter(df_set["SepalLengthCm"], df_set["SepalWidthCm"], s=10, c="blue", label="Setosa")
ax1.scatter(df_ver["SepalLengthCm"], df_ver["SepalWidthCm"], s=10, c="orange", label="Versicolor")
ax1.scatter(df_vir["SepalLengthCm"], df_vir["SepalWidthCm"], s=10, c="green", label="Virginica")

plt.legend(loc="upper left")
plt.title("Gráfica para el Sépalo - con Matplotlib")
plt.xlabel("Longitud")
plt.ylabel("Anchura")
plt.show()
```

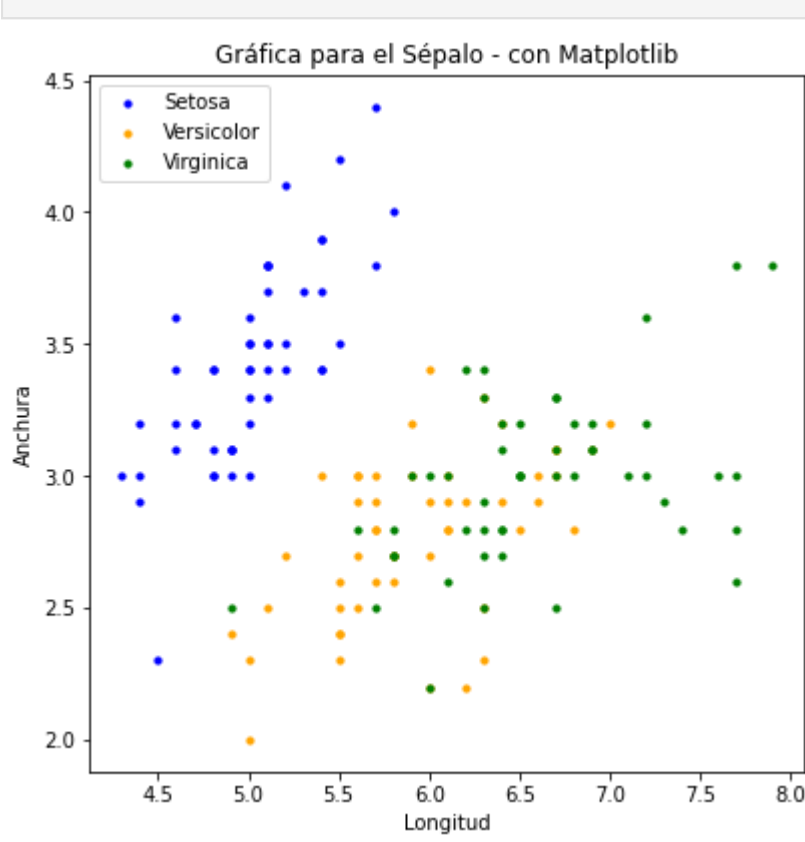


GRÁFICO CON SEABORN - SÉPALO

```
In [15]: # pip install seaborn

sns.FacetGrid(df, hue="Species", height=6.4)\
.map(plt.scatter, "SepalLengthCm", "SepalWidthCm")\
.add_legend()

plt.title("Gráfica para el Sépalo - con Seaborn")
plt.show()
```

