Python library Pandas

In [7]:
```
import pandas as pd
dades = {'Nom': ['Sònia', 'Laura', 'David', 'Rosa', 'Sam'],
        'Dept' : ['PROD', 'ADMIN', 'MANT', 'ADMIN', 'PROD'],
        'DiesV' : [32, 55, 20, 43, 30]}

df = pd.DataFrame(dades)
print (df)
```

```
     Nom   Dept  DiesV
0  Sònia   PROD     32
1  Laura  ADMIN     55
2  David   MANT     20
3   Rosa  ADMIN     43
4    Sam   PROD     30
```

In [8]:
```
df[df["Nom"] == "Rosa"]
```

Out[8]:

	Nom	Dept	DiesV
3	Rosa	ADMIN	43

In [9]:
```
df["Nom"] == "Rosa"
```

Out[9]:
```
0    False
1    False
2    False
3     True
4    False
Name: Nom, dtype: bool
```

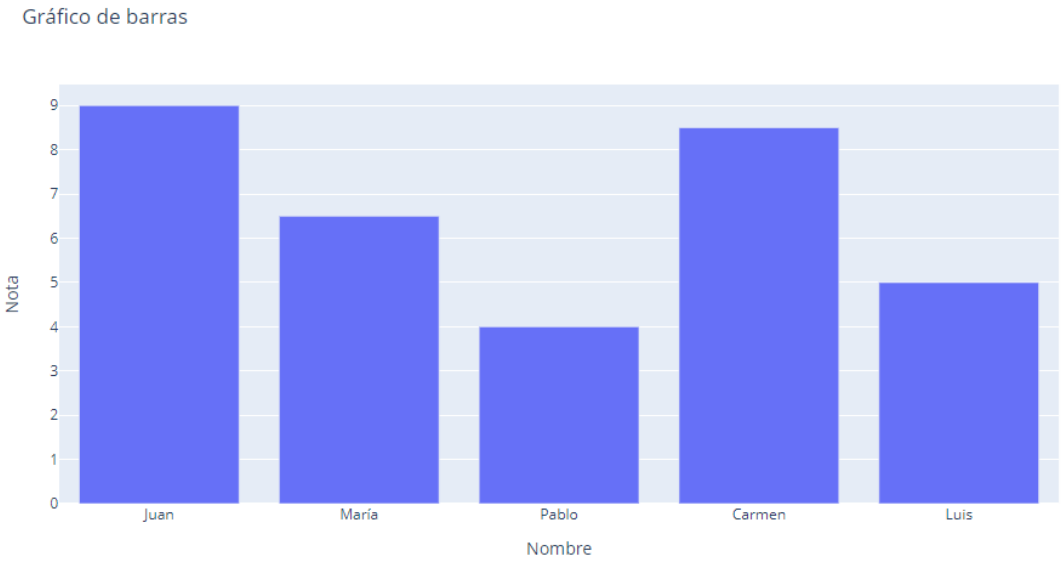
Práctica P01

In [10]:
```
import pandas as pd

notas = {'Juan':9.0,'María':6.5,'Pablo':4.0,'Carmen':8.5,'Luis':5.0}

df = pd.DataFrame ({"Nombre": notas.keys(),
                    "Nota": notas.values()})

print(df)
print("\nDatos estadísticos:\n")
print(df.describe())
```

```
   Nombre  Nota
0    Juan   9.0
1   María   6.5
2   Pablo   4.0
3  Carmen   8.5
4    Luis   5.0

Datos estadísticos:

            Nota
count  5.000000
mean   6.600000
std    2.162175
min    4.000000
25%    5.000000
50%    6.500000
75%    8.500000
max    9.000000
```

In [11]:

```
import plotly.express as px


fig = px.bar(df, x="Nombre", y="Nota", title="Gráfico de barras")
fig.show()
```

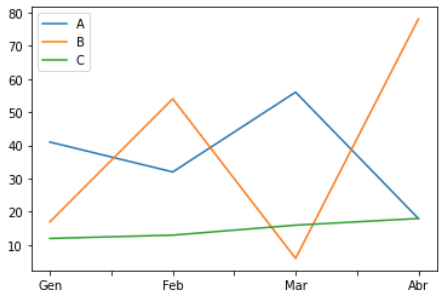


In [14]:

```
import pandas as pd

dfventas = pd.DataFrame({"A":[41,32,56,18],
                         "B":[17,54,6,78],
                         "C":[12,13,16,18] },
                         index = ["Gen", "Feb", "Mar", "Abr"])
print(dfventas)

dfventas.describe()


dfventas.plot()
```

```
      A   B   C
Gen  41  17  12
Feb  32  54  13
Mar  56   6  16
Abr  18  78  18
```

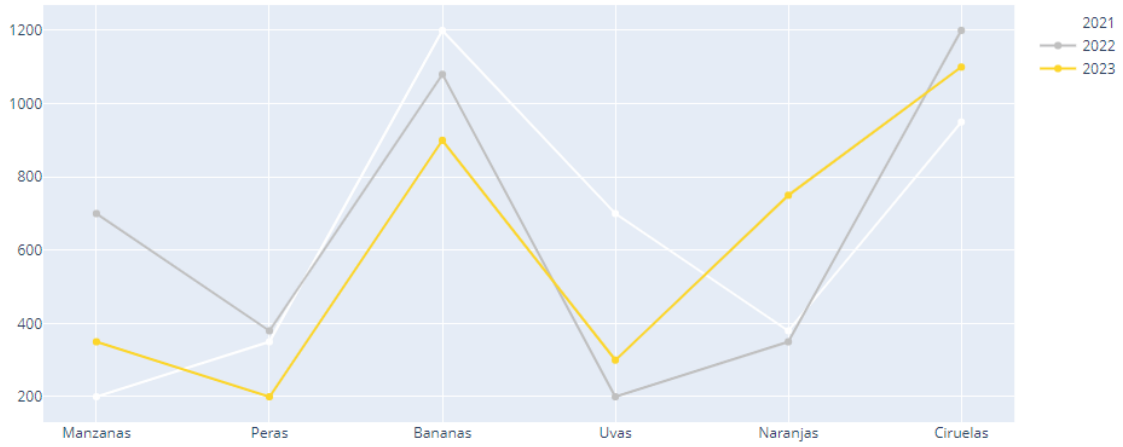
Out[14]: <AxesSubplot:>



Ejercicio 4

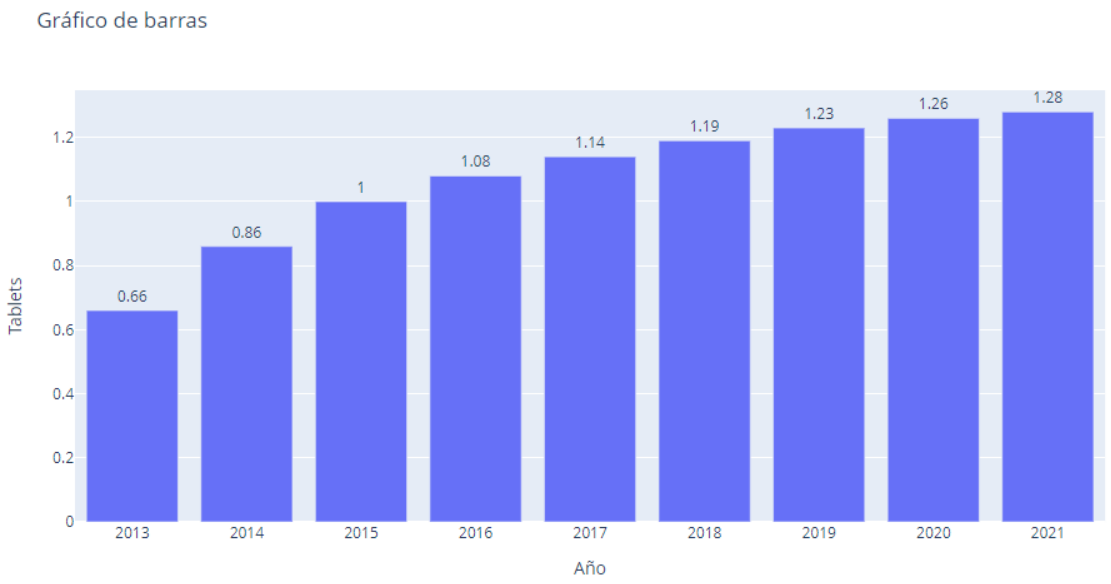
In [15]:

```
import plotly.graph_objects as go

x = ["Manzanas", "Peras", "Bananas", "Uvas", "Naranjas", "Ciruelas"]
year2021 = [200, 350, 1200, 700, 380, 950]
year2022 = [700, 380, 1080, 200, 350, 1200]
year2023 = [350, 200, 900, 300, 750, 1100]

fig = go.Figure(data=[go.Scatter(x=x, y=year2021, name='2021', marker_color="white"),
                go.Scatter(x=x, y=year2022, name='2022', marker_color="silver"),
                go.Scatter(x=x, y=year2023, name='2023', marker_color ="gold")
                ])

fig.show()
```



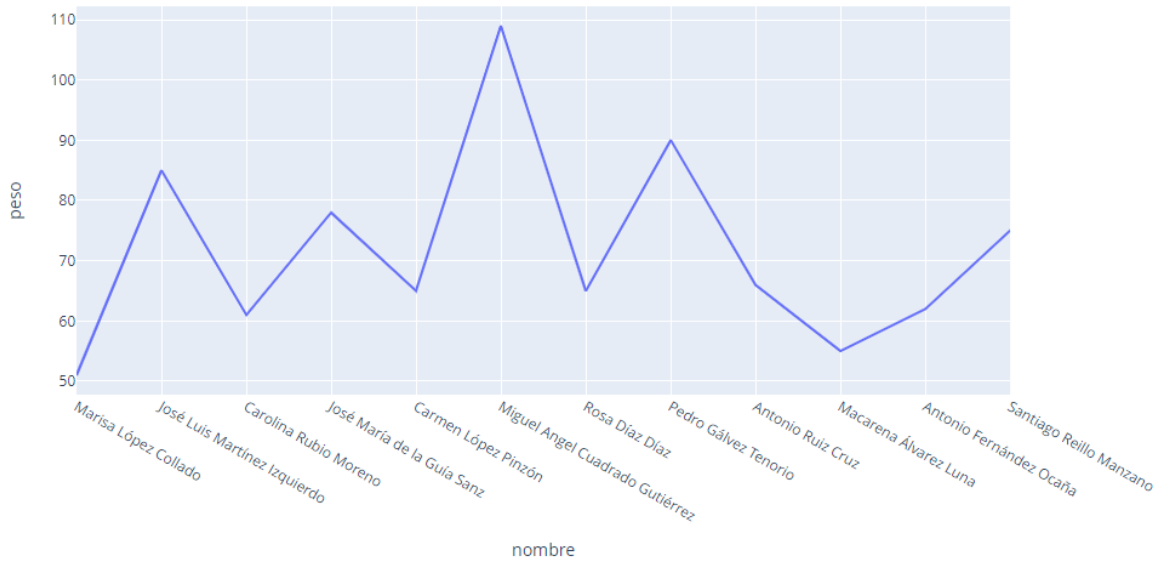
In [27]:

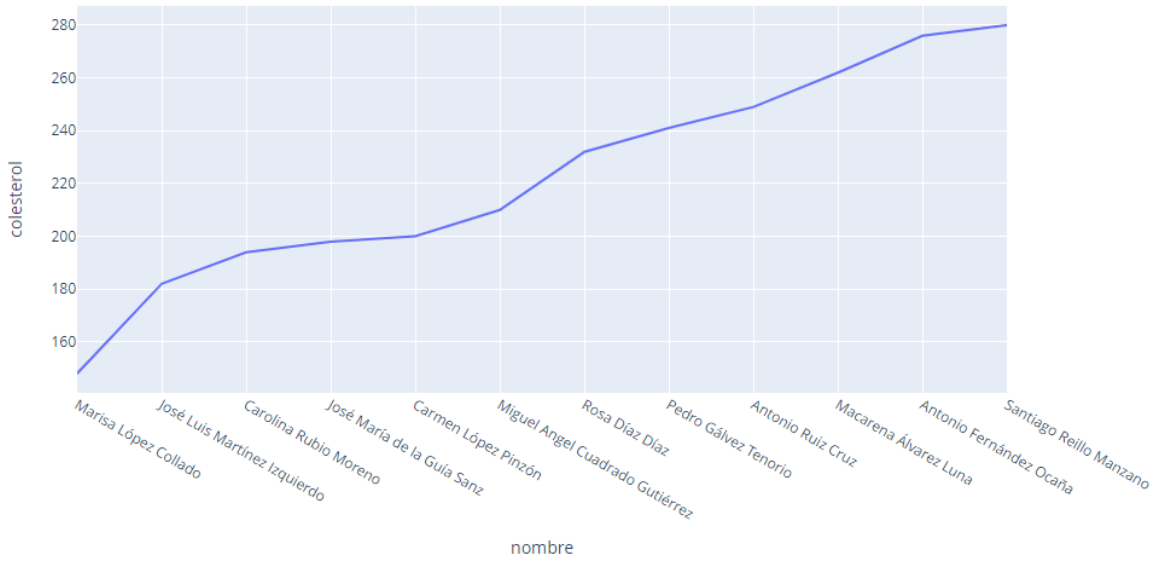
```
import plotly.express as px
import pandas as pd




dftablets = pd.DataFrame({"Año": [2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021], \
                          "Tablets":[0.66, 0.86, 1, 1.08, 1.14, 1.19, 1.23, 1.26, 1.28]})

fig = px.bar(dftablets, x="Año", y="Tablets", title="Gráfico de barras", text_auto=True)

fig.update_traces(textfont_size=12, textangle=0, textposition="outside", cliponaxis=False)

fig.show()
```



In [20]:

```
import plotly.graph_objects as go

fig = go.Figure()

fig = px.line(df, x="nombre", y="peso")
fig.show()

fig = px.line(df, x="nombre", y = "colesterol")
fig.show()
```





In [22]:

```python
# importing pandas as pd
import pandas as pd
from IPython.display import HTML

# creating the dataframe
df = pd.DataFrame({"Name": ['Anurag', 'Manjeet', 'Shubham',
                            'Saurabh', 'Ujjawal'],

                   "Address": ['Patna', 'Delhi', 'Coimbatore',
                               'Greater noida', 'Patna'],

                   "ID": [20123, 20124, 20145, 20146, 20147],

                   "Sell": [140000, 300000, 600000, 200000, 600000]})

print("Original DataFrame :")
display(df)
```

```
Original DataFrame :
```

	Name	Address	ID	Sell
0	Anurag	Patna	20123	140000
1	Manjeet	Delhi	20124	300000
2	Shubham	Coimbatore	20145	600000
3	Saurabh	Greater noida	20146	200000
4	Ujjawal	Patna	20147	600000