In [2]:
```
1 import pandas as pd
2 dades = {'Nom': ['Sònia', 'Laura', 'David', 'Rosa', 'Sam'],
3          'Dept' : ['PROD', 'ADMIN', 'MANT', 'ADMIN', 'PROD'],
4          'DiesV' : [32, 55, 20, 43, 30]}
5 df = pd.DataFrame(dades)
```

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

In [4]:
```
1 import pandas as pd
2 ventas = pd.DataFrame({"A":[41,32,56,18],
3                        "B":[17,54,6,78],
4                        "C":[12,13,16,18] })
```

	A	B	C
0	41	17	12
1	32	54	13
2	56	6	16
3	18	78	18

In [10]:
```
1 import pandas as pd
2 ventas = pd.DataFrame({"A":[41,32,56,18],
3                        "B":[17,54,6,78],
4                        "C":[12,13,16,18] },
5 index = ["Gen", "Feb", "Mar", "Abr"])
```

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

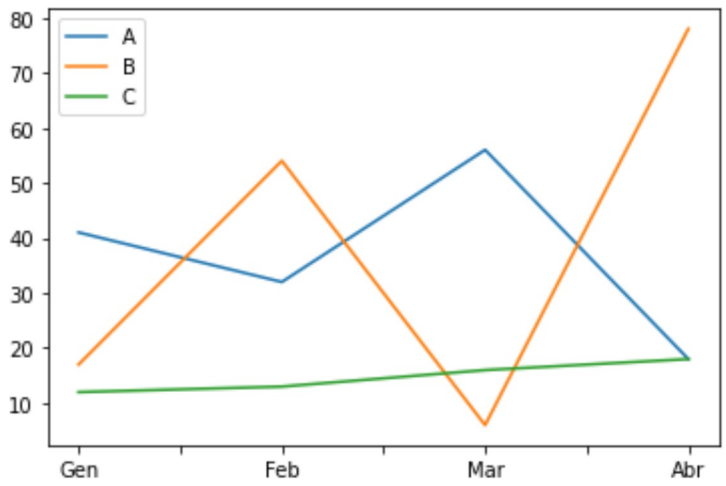
Práctica P01 Ejercicio 1: Dado este diccionario crea un DataFramecon nombre de columnas ‘nombre’ y ‘nota: notas={'Juan':9.0,'María':6.5,'Pablo':4.0,'Carmen':8.5,'Luis':5.0} Calcula la nota mínima, la máxima, la media y la desviación típica.

In [17]:
```
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("datos estadisticos")
```

```
   nombre  nota
0    Juan   9.0
1   María   6.5
2   Pablo   4.0
3  Carmen   8.5
4    Luis   5.0
datos estadisticos
           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 [25]:
```
import pandas as pd
ventas = pd.DataFrame({"A":[41,32,56,18],
"B":[17,54,6,78],
"C":[12,13,16,18] },
index = ["Gen", "Feb", "Mar", "Abr"])
ventas.plot()
```

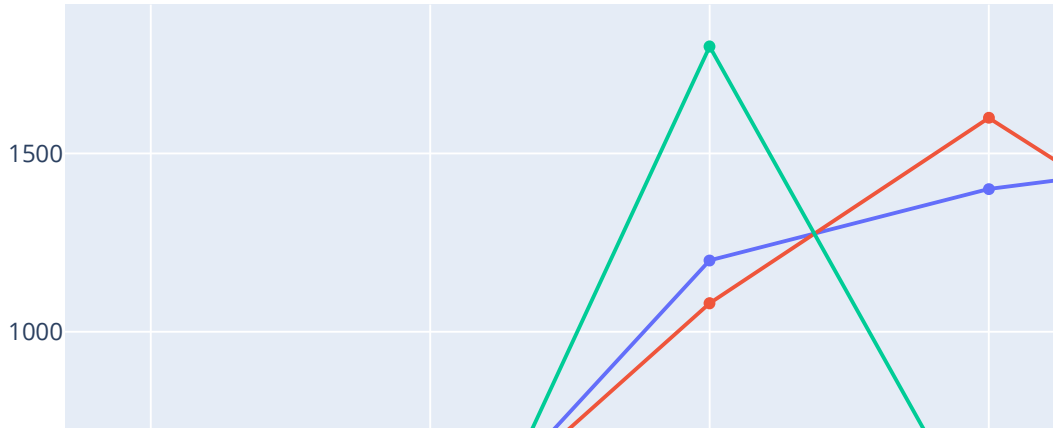
Out[25]: <AxesSubplot:>



Ejercicio 4 Añade 3 productos y un año a la siguiente gráfica.

In [4]:

```
import plotly.graph_objects as go
x = ["Manzanas", "Peras", "Bananas"]
year2021 = [200, 350, 1200]
year2022 = [700, 380, 1080]
x = x +["Fresa","Nispero","Piña"]
year2021 = year2021+[1400,1500,100]
year2022 = year2022+[1600,1100,260]
year2023=[123,111,1800,400,655,988]
fig = go.Figure(data=[go.Scatter(x=x, y=year2021, name='2021'),
                      go.Scatter(x=x, y=year2022, name='2022'),
                      go.Scatter(x=x, y=year2023, name='2023')])


```



In [8]:
```
import pandas as pd


import plotly.graph_objects as go

df = pd.read_csv( 'https://raw.githubusercontent.com/asalber/manual-pyt

df.info()
df = df.dropna()

print(df.sort_values(by=['colesterol']))

fig = px.line(df, x="nombre", y="peso", title='Peso')
fig.show()
fig = px.line(df, x="nombre", y="colesterol", title='Colesterol')
```

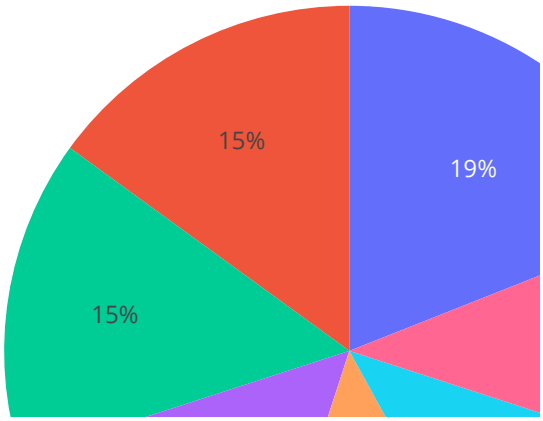
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 14 entries, 0 to 13
Data columns (total 6 columns):
 #   Column      Non-Null Count  Dtype  
---  ------      --------------  -----  
 0   nombre      14 non-null     object 
 1   edad        14 non-null     int64  
 2   sexo        14 non-null     object 
 3   peso        13 non-null     float64
 4   altura      14 non-null     float64
 5   colesterol  13 non-null     float64
dtypes: float64(3), int64(1), object(2)
memory usage: 800.0+ bytes
                            nombre  edad sexo   peso  altura  colesterol
4              Marisa López Collado    46    M   51.0    1.58       148.0
0      José Luis Martínez Izquierdo    18    H   85.0    1.79       182.0
13             Carolina Rubio Moreno    20    M   61.0    1.77       194.0
11       José María de la Guía Sanz    58    H   78.0    1.87       198.0
3                Carmen López Pinzón    35    M   65.0    1.70       200.0
```

In [5]:
```
import pandas as pd

URL = 'http://raw.githubusercontent.com/BindiChen/machine-learning/mast
df = pd.read_json(URL)

print(df)
```

```
     id   name  math  physics  chemistry
0  A001    Tom    60       66         61
1  A002  James    89       76         51
2  A003  Jenny    79       90         78
```

In [1]:

```
1  import plotly.graph_objects as go
2
3  labels = ['8-12','13-17','18-24','25-29','30-34','35-39','40-45']
4  values = [12, 13,15,15,19,15,11]
5
6  fig = go.Figure(data=[go.Pie(labels=labels, values=values)])
```



In [5]:

```
1 import matplotlib.pyplot as plt
2 import numpy as np
3
4 y = np.array([35, 25, 25, 15])
5 mylabels = ["Apples", "Bananas", "Cherries", "Dates"]
6
7 plt.pie(y, labels = mylabels, startangle = 90)
```