

Import Library

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

Bikin Dataframe, dengan random int, interval -100 - 100, size 100 rows 4 columns, columns -> A,B,C,D

```
In [12]: df = pd.DataFrame(np.random.randint(-100,100, size=(100,4)), columns=list("ABCD"))
df
```

```
Out[12]:
```

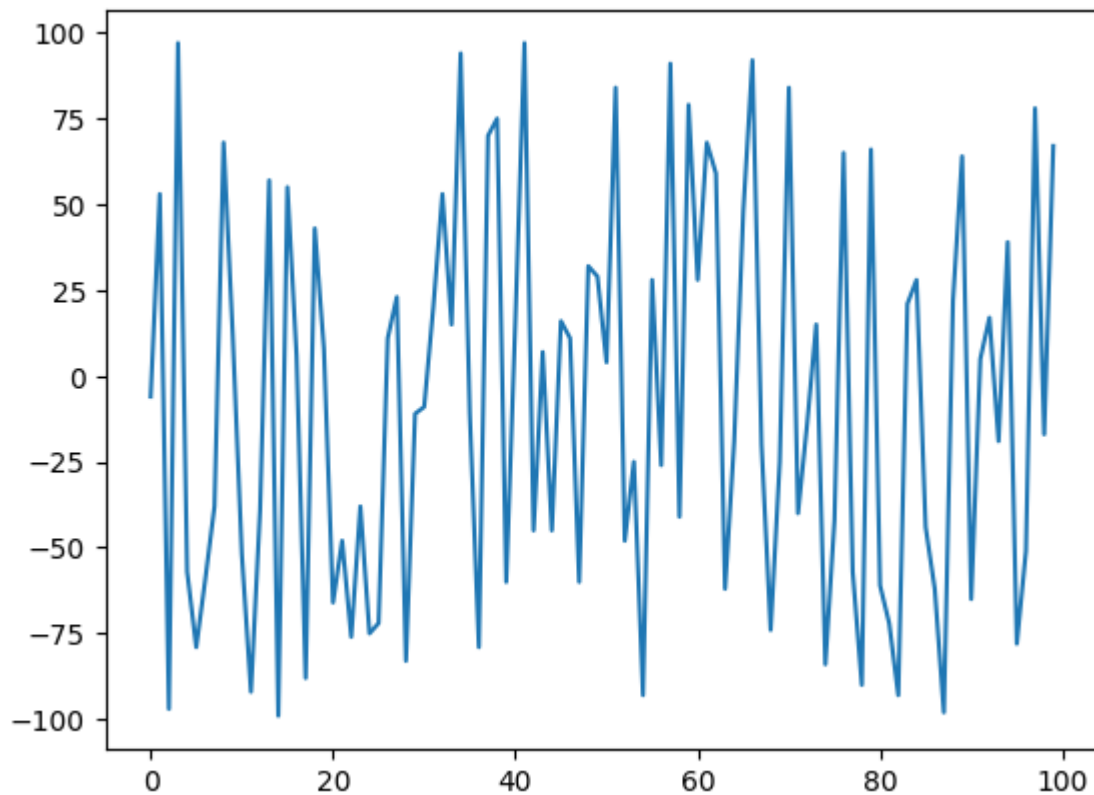
	A	B	C	D
0	-6	28	-81	-86
1	53	-54	-13	6
2	-97	-46	-57	6
3	97	-36	12	-99
4	-57	15	27	19
...
95	-78	-57	-9	-90
96	-51	75	45	76
97	78	-88	63	-49
98	-17	-53	34	-22
99	67	-1	10	-1

100 rows × 4 columns

Line chart, menggunakan column A, dengan semua index

```
In [13]: df['A'].plot()
```

```
Out[13]: <AxesSubplot:>
```



Karena GAP terlalu tinggi, maka dilakukan cumulative sum

```
In [14]: df2 = df.cumsum()
df2
```

```
Out[14]:
```

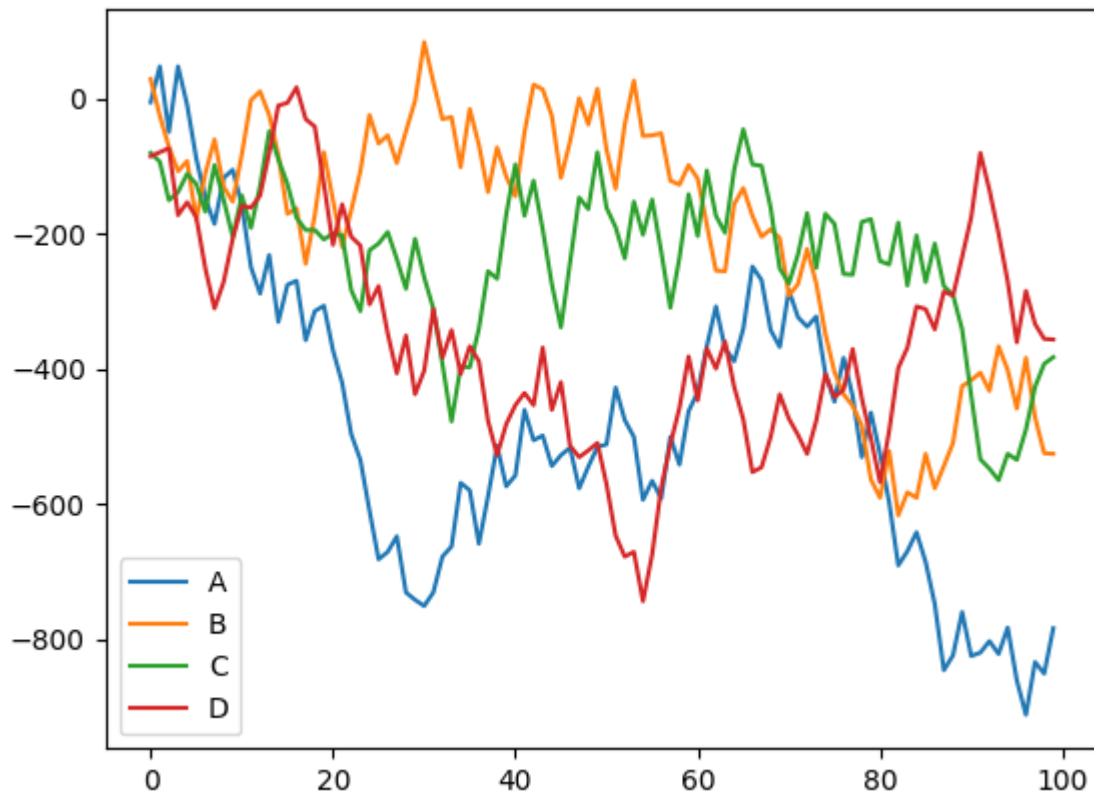
	A	B	C	D
0	-6	28	-81	-86
1	47	-26	-94	-80
2	-50	-72	-151	-74
3	47	-108	-139	-173
4	-10	-93	-112	-154
...
95	-861	-459	-535	-361
96	-912	-384	-490	-285
97	-834	-472	-427	-334
98	-851	-525	-393	-356
99	-784	-526	-383	-357

100 rows × 4 columns

Line Chart semua kolom, hasil cumsum

```
In [17]: df2.plot()
```

```
Out[17]: <AxesSubplot:>
```



Membuat kolom baru 'number', dengan value seperti index, karena menampung list -> dan di dalamnya diisi range -> sepanjang df2(yakni 100 rows)

```
In [21]: df2['number'] = pd.Series(list(range(len(df2))))  
df2
```

Out[21]:

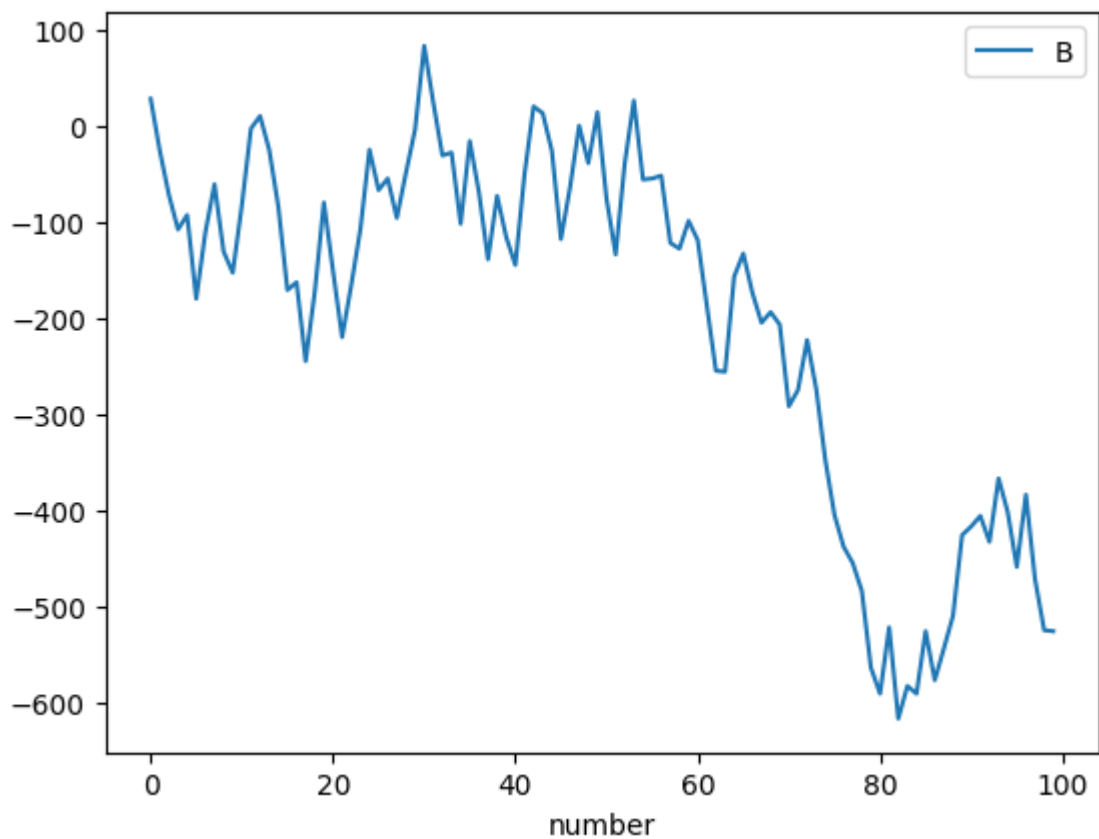
	A	B	C	D	number
0	-6	28	-81	-86	0
1	47	-26	-94	-80	1
2	-50	-72	-151	-74	2
3	47	-108	-139	-173	3
4	-10	-93	-112	-154	4
...
95	-861	-459	-535	-361	95
96	-912	-384	-490	-285	96
97	-834	-472	-427	-334	97
98	-851	-525	-393	-356	98
99	-784	-526	-383	-357	99

100 rows × 5 columns

Membuat Line Chart, dengan props x dan y

```
In [23]: df2.plot(x='number', y='B')
```

Out[23]: <AxesSubplot:xlabel='number'>



iloc -> index

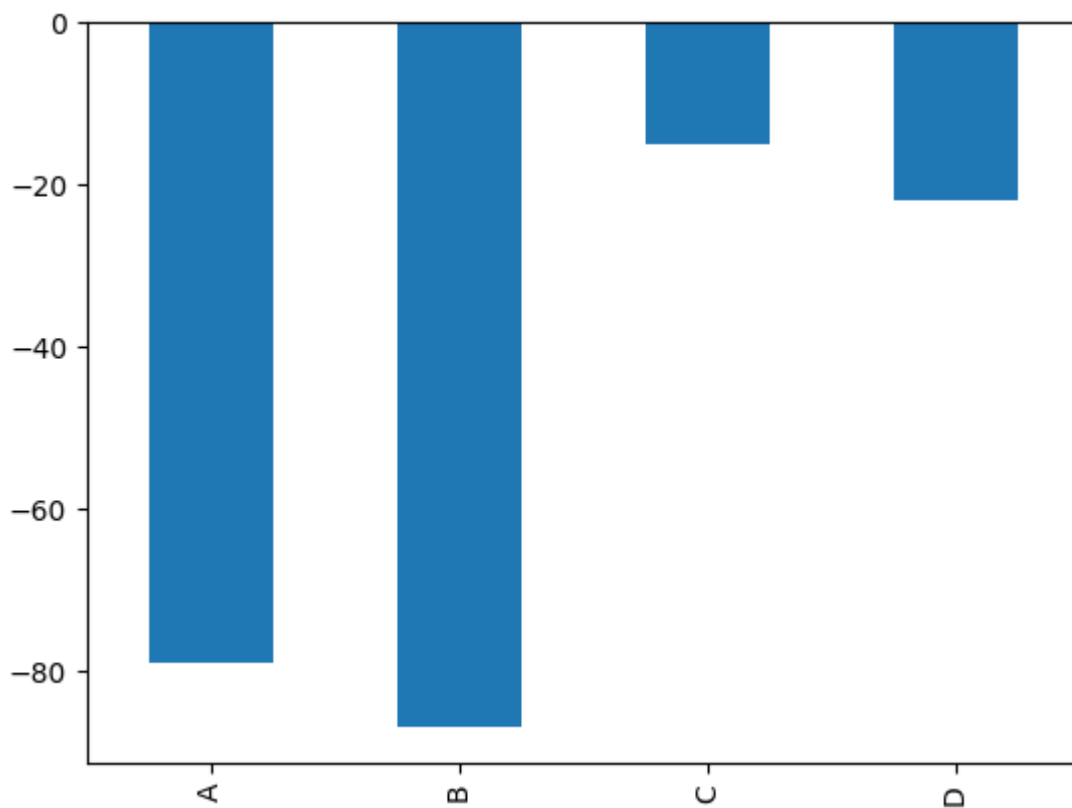
```
In [25]: df.iloc[5]
```

```
Out[25]: A    -79  
        B    -87  
        C    -15  
        D    -22  
        Name: 5, dtype: int32
```

Membuat bar plot, untuk index 5 saja

```
In [28]: plt.figure()  
        df.iloc[5].plot(kind='bar')
```

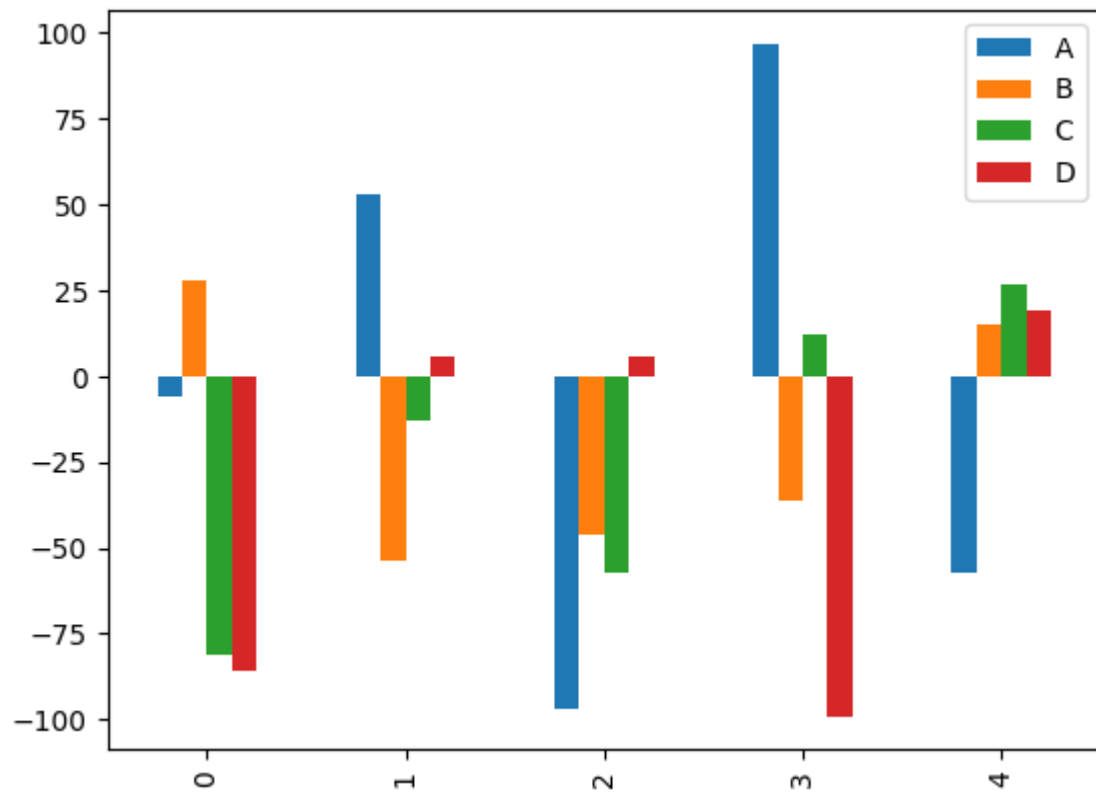
```
Out[28]: <AxesSubplot:>
```



membuat barplot untuk index 0:5, karena head()

```
In [31]: df.head().plot.bar()
```

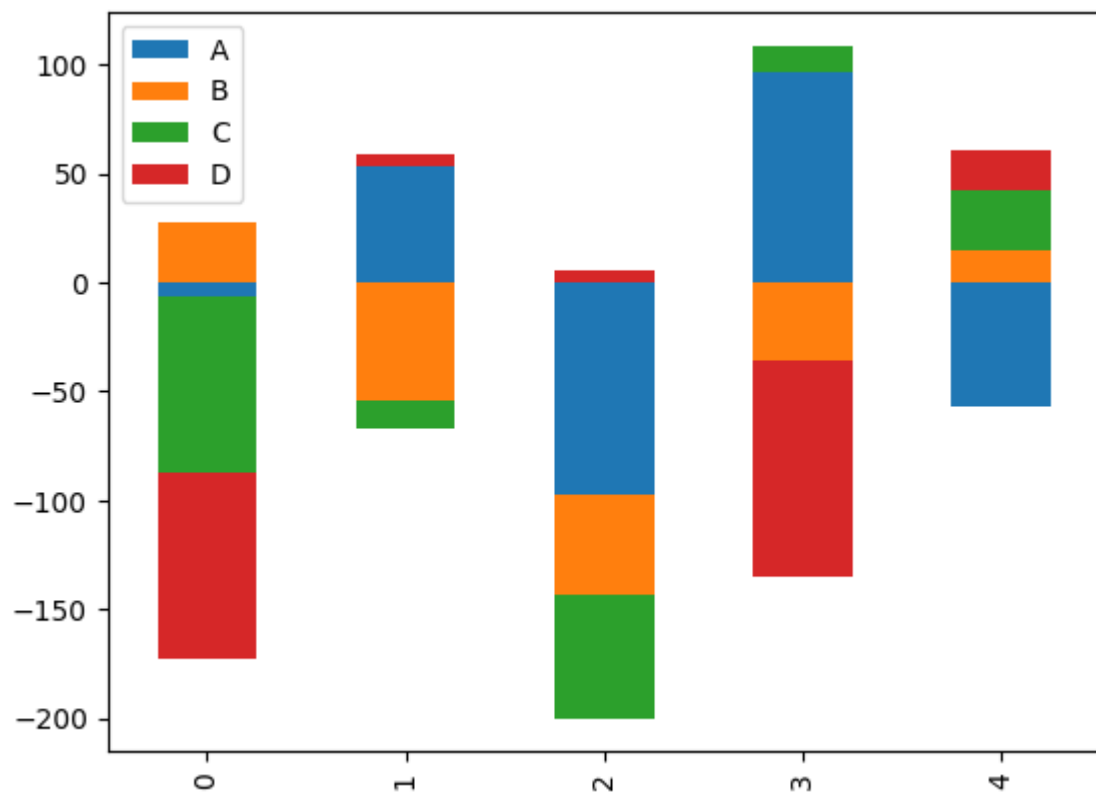
```
Out[31]: <AxesSubplot:>
```



Membuat bar plot, tapi di stack, alias di cumulative kan

```
In [33]: df.head().plot.bar(stacked=True)
```

```
Out[33]: <AxesSubplot:>
```



Sama seperti diatas, membuat barplot tapi horizontal

```
In [34]: df.head().plot.barh()
```

```
Out[34]: <AxesSubplot:>
```

