## 260720241457

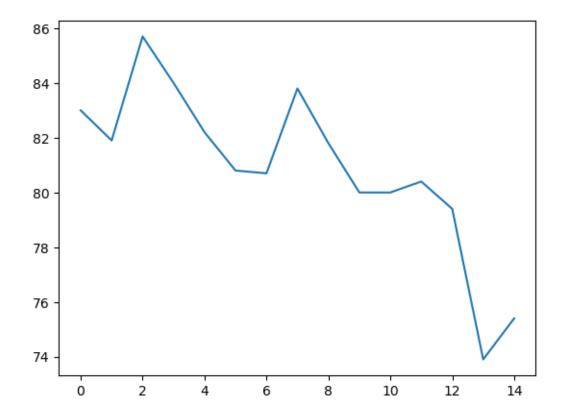
## August 26, 2024

Occupazione per livello di istruzione in Valle d'Aosta dai dati oecd.

```
[1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sklearn.linear_model import LinearRegression

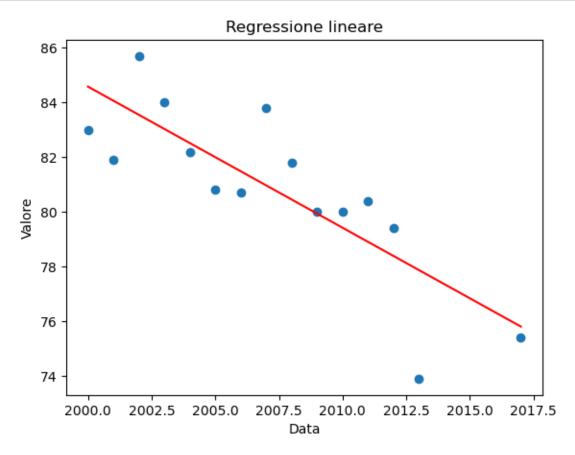
df = pd.read_csv('oecd-va.csv')
df['OBS_VALUE'].plot()
```

## [1]: <AxesSubplot: >



Regressione lineare  $y=\beta_0+\beta_1x+\varepsilon$  per rilevare il tendenza.

```
[2]: model = LinearRegression()
    X = df['TIME_PERIOD'].values.reshape(-1, 1)
    y = df['OBS_VALUE'].values
    model.fit(X, y)
    plt.plot(df['TIME_PERIOD'], df['OBS_VALUE'], 'o')
    plt.plot(df['TIME_PERIOD'], model.predict(X), 'r')
    plt.xlabel('Data')
    plt.ylabel('Valore')
    plt.title('Regressione lineare')
    plt.show()
```



```
[]:
```