

```
In [10]: mylist = [7, 2, 0, 3, 4, 2, 5, 0, 3, 4]
i = 0
y = []

for x in l:
    if x != 0:
        i = i + 1
    else:
        i = 0
    y.append(i)
y
```

Out[10]: [1, 2, 0, 1, 2, 3, 4, 0, 1, 2]

```
In [2]: import pandas as pd

s = pd.Series([7, 2, 0, 3, 4, 2, 5, 0, 3, 4])

(s.groupby(s.eq(0).cumsum().mask(s.eq(0))).cumcount() + 1).mask(s.eq(0), 0).to
list()
```

Out[2]: [1, 2, 0, 1, 2, 3, 4, 0, 1, 2]

```
In [19]: import numpy as np
mydti = pd.date_range(start='2015-01-01', end='2015-12-31', freq='B')
s = pd.Series(np.random.rand(len(mydti)), index=mydti)
s
```

```
Out[19]: 2015-01-01    0.285151
          2015-01-02    0.362307
          2015-01-05    0.685471
          2015-01-06    0.737332
          2015-01-07    0.458355
          2015-01-08    0.141911
          2015-01-09    0.455301
          2015-01-12    0.526278
          2015-01-13    0.653731
          2015-01-14    0.691939
          2015-01-15    0.480330
          2015-01-16    0.817594
          2015-01-19    0.667449
          2015-01-20    0.192651
          2015-01-21    0.272776
          2015-01-22    0.852543
          2015-01-23    0.567112
          2015-01-26    0.113078
          2015-01-27    0.105644
          2015-01-28    0.744900
          2015-01-29    0.417822
          2015-01-30    0.622133
          2015-02-02    0.081471
          2015-02-03    0.463224
          2015-02-04    0.654864
          2015-02-05    0.975416
          2015-02-06    0.606594
          2015-02-09    0.958875
          2015-02-10    0.101988
          2015-02-11    0.535301
          ...
          2015-11-20    0.329431
          2015-11-23    0.798501
          2015-11-24    0.833220
          2015-11-25    0.484855
          2015-11-26    0.074337
          2015-11-27    0.605465
          2015-11-30    0.143751
          2015-12-01    0.168188
          2015-12-02    0.885129
          2015-12-03    0.378361
          2015-12-04    0.153456
          2015-12-07    0.575323
          2015-12-08    0.422731
          2015-12-09    0.544545
          2015-12-10    0.388016
          2015-12-11    0.866112
          2015-12-14    0.545066
          2015-12-15    0.424560
          2015-12-16    0.876964
          2015-12-17    0.519806
          2015-12-18    0.274908
          2015-12-21    0.404071
          2015-12-22    0.824601
          2015-12-23    0.457531
          2015-12-24    0.188073
          2015-12-25    0.832751
```

```
2015-12-28    0.628803
2015-12-29    0.696590
2015-12-30    0.701032
2015-12-31    0.760858
Freq: B, Length: 261, dtype: float64
```

```
In [21]: s[s.index.weekday == 2].sum()
```

```
Out[21]: 28.56350536137436
```

```
In [25]: avg_M=s.resample('M').mean()
avg_M
```

```
Out[25]: 2015-01-31    0.493264
2015-02-28    0.495887
2015-03-31    0.442868
2015-04-30    0.521585
2015-05-31    0.537034
2015-06-30    0.521567
2015-07-31    0.568609
2015-08-31    0.507287
2015-09-30    0.453464
2015-10-31    0.499880
2015-11-30    0.493434
2015-12-31    0.544238
Freq: M, dtype: float64
```

```
In [30]: s.groupby(pd.Grouper(freq='4M')).idxmax()
```

```
Out[30]: 2015-01-31    2015-01-22
2015-05-31    2015-05-15
2015-09-30    2015-06-01
2016-01-31    2015-10-07
dtype: datetime64[ns]
```

```
In [ ]:
```