JakeDineen_5.3

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In [1]: import numpy as np
        import pandas as pd

        #Create dict
        persondict = {'person':['Bob','Alice','Steve'], 'age':[32, 24, 64], 'weight':[128, 86,

        #Store in a df
        people = pd.DataFrame(persondict, columns =['person', 'age', 'weight'])
        people.set_index('person', inplace = True)
        people

Out[1]:         age  weight
        person
        Bob      32     128
        Alice    24      86
        Steve    64      95

In [2]: #Stack into tall object
        people = people.stack()
        people.index

Out[2]: MultiIndex(levels=[['Bob', 'Alice', 'Steve'], ['age', 'weight']],
                   labels=[[0, 0, 1, 1, 2, 2], [0, 1, 0, 1, 0, 1]],
                   names=['person', None])

In [3]: #Reset the index
        persontall = people.reset_index()

In [4]: #Rename columns
        persontall.columns = ['person', 'attribute', 'value']

In [5]: #Convert back to original
        unstacked = people.unstack()
        unstacked.reset_index(inplace = True)
        unstacked

Out[5]:   person  age  weight
        0    Bob   32     128
        1  Alice   24      86
        2  Steve   64      95
```

```
In [8]: #Pivot
        persontall.pivot('person','attribute','value')

Out[8]: attribute   age   weight
        person
        Alice          24       86
        Bob            32      128
        Steve          64       95
```