Create subtotals for rows in pivot table for different columns

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I am creating a pivot table with Pandas but got stuck at the subtotals for rows within different columns (under the same Values) for a while, I've done some research on stackoverflow such as Pandas Pivot tables row subtotals and this Subtotals for Pandas pivot table index and column (actually this one is close to but some what also different from my case) but didn't find right hint for my case, so please for this topic, thanks.

Here I will provide a simplified DataFrame (original one is too big to show here, so their values really do not matter, the format is what I am looking for) of my case and the code I wrote to get my pivot table.

```python
import pandas as pd
import numpy as np
df = pd.DataFrame(
{
    'Co':['NN']*6,
    'Op':['A','B']*3,
    'Stk':[1.1,1.2,1.3]*2,
    'Tm':['07-01-2018','08-01-2018','09-01-2018']*2,
    'Qt':[100,200,300]*2
}
)
df
```

The df output looks like:

```
Co  Op  Qt   Stk Tm
0   NN  A    100 1.1 07-01-2018
1   NN  B    200 1.2 08-01-2018
2   NN  A    300 1.3 09-01-2018
3   NN  B    100 1.1 07-01-2018
4   NN  A    200 1.2 08-01-2018
5   NN  B    300 1.3 09-01-2018
```

Then I convert above df to my pivot table by:

```python
df['Qt'] = df['Qt'].apply(pd.to_numeric)
df['Stk']=df['Stk'].apply(pd.to_numeric)
df['Co'] = df['Co'].astype(str)
tb=pd.pivot_table(df,index=["Tm"],columns=["Co","Op","Stk"],aggfunc=np.sum,values=
['Qt'], fill_value=0, margins=True, margins_name='All')
tb
```

The generated pivot table looks like:

	Qt		All
Co	NN		
Op	A	B	

```
09-01-2018   0     0    300   0     0    300    600
        All  100   200  300   100   200  300    1200
```

The format which I really expect is:

```
           Qt
Co         NN                                         All
Op         A             ATotal  B             BTotal
Stk        1.1  1.2  1.3          1.1  1.2  1.3
      Tm
07-01-2018 100  0    0    100    100  0    0    100     200
08-01-2018 0    200  0    200    0    200  0    200     400
09-01-2018 0    0    300  300    0    0    300  300     600
      All  100  200  300  600    100  200  300  600     1200
```

I was trying to create this exact same format for a while and still can't get the same one (I tried something like creating two separate A and B pivot tables and union them together, but it will mess with the All margins). So help is really needed here. p.s. I am still new to stackoverflow community, so please pardon if my question is missing some aspects, thank you.

python   pandas   pivot-table

asked Jun 6 '18 at 22:27

Gin
94   9

1 Answer

`pivot_table` doesn't support it, but you can compute it yourself and concatenate it later:

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```
tb.groupby(level='Op', axis=1).sum().add_suffix('Total')
```

```
Op          Total  ATotal  BTotal
Tm
07-01-2018  200    100     100
08-01-2018  400    200     200
09-01-2018  600    300     300
All         1200   600     600
```

answered Jun 6 '18 at 22:40

cs95
159k   26   218   288

Thanks for the answer, I actually got sth similar as yours by concatenate two pivot tables (two pivot table with different columns).... So I'm exploring if there's any option to incorporate them inside the pivot table with the exactly same format (I am also new to Pandas though)... – Gin   Jun 6 '18 at 23:07 ✎

@Jay Can't have the cake and eat it too my friend. – cs95 Jun 6 '18 at 23:12

in Excel I know we can create a sub pivot table inside a major pivot table which is what I would expect, so you wouldn't believe the Pandas can do something similar? Thanks. – Gin Jun 6 '18 at 23:16