



```
Out [35]: Mozilla/5.0          2594
          Mozilla/4.0         601
          GoogleMaps/RochesterNY 121
          Opera/9.80           34
          TEST_INTERNET_AGENT  24
          GoogleProducer       21
          Mozilla/6.0          5
          BlackBerry8520/5.0.0.681 4
          dtype: int64
```

```
In [36]: # 윈도우 사용자와비윈도우 사용자 그룹으로 구분

cframe = frame[frame["a"].notna()].copy()
```

```
In [37]: cframe["os"] = np.where(cframe["a"].str.contains("Windows"),
                                "Windows", "Not Windows")
cframe["os"].head(5)
```

```
Out [37]: 0      Windows
          1    Not Windows
          2      Windows
          3    Not Windows
          4      Windows
          Name: os, dtype: object
```

```
In [38]: by_tz_os = cframe.groupby(["tz", "os"])
```

```
In [39]: agg_counts = by_tz_os.size().unstack().fillna(0)
agg_counts.head()
```

```
Out [39]:
```

	os	Not Windows	Windows
	tz		
		245.0	276.0
	Africa/Cairo	0.0	3.0
	Africa/Casablanca	0.0	1.0
	Africa/Ceuta	0.0	2.0
	Africa/Johannesburg	0.0	1.0

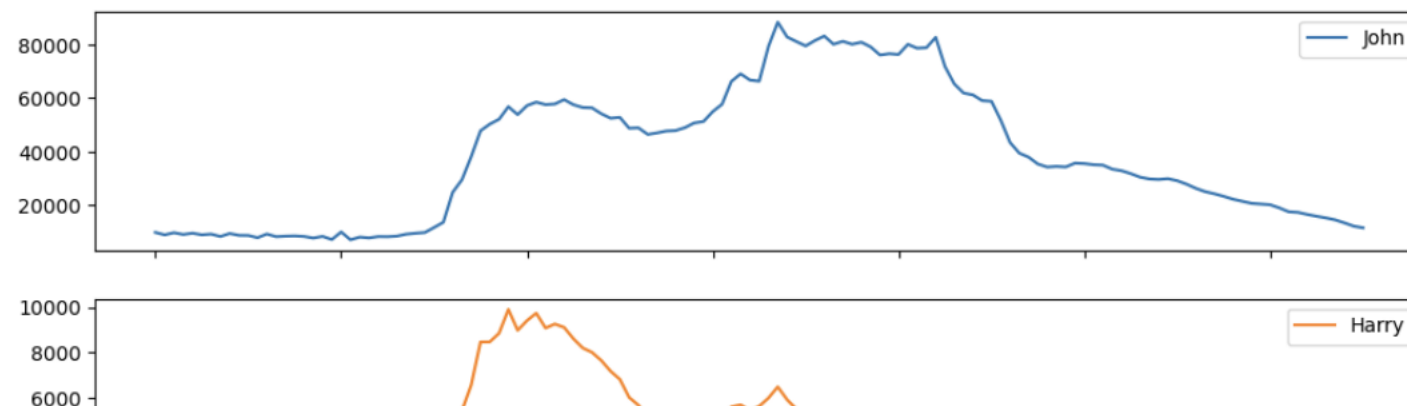
```
In [89]: total_births = top1000.pivot_table("births", index="year",
      columns="name",
      aggfunc=sum)
```

```
In [90]: total_births.info()
subset = total_births[["John", "Harry", "Mary", "Marilyn"]]
subset.plot(subplots=True, figsize=(12, 10),
            title="Number of births per year")
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 131 entries, 1880 to 2010
Columns: 6868 entries, Aaden to Zuri
dtypes: float64(6868)
memory usage: 6.9 MB
```

```
Out [90]: array([<AxesSubplot: xlabel='year'>, <AxesSubplot: xlabel='year'>,
      <AxesSubplot: xlabel='year'>, <AxesSubplot: xlabel='year'>],
      dtype=object)
```

Number of births per year



0 1 2 3 4 5

```
In [124]: by_nutrient = ndata.groupby(["nutgroup", "nutrient"])

def get_maximum(x):
    return x.loc[x.value.idxmax()]

max_foods = by_nutrient.apply(get_maximum)[["value", "food"]]

# make the food a little smaller
max_foods["food"] = max_foods["food"].str[:50]
```

```
In [125]: max_foods.loc["Amino Acids"]["food"]
```

```
Out[125]: nutrient
Alanine          Gelatins, dry powder, unsweetened
Arginine          Seeds, sesame flour, low-fat
Aspartic acid     Soy protein isolate
Cystine           Seeds, cottonseed flour, low fat (glandless)
Glutamic acid     Soy protein isolate
Glycine           Gelatins, dry powder, unsweetened
Histidine         Whale, beluga, meat, dried (Alaska Native)
Hydroxyproline    KENTUCKY FRIED CHICKEN, Fried Chicken, ORIGINAL RE
Isoleucine        Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Leucine           Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Lysine            Seal, bearded (Oogruk), meat, dried (Alaska Native)
Methionine        Fish, cod, Atlantic, dried and salted
Phenylalanine     Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Proline           Gelatins, dry powder, unsweetened
Serine            Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Threonine         Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Tryptophan        Sea lion, Steller, meat with fat (Alaska Native)
Tyrosine          Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Valine            Soy protein isolate, PROTEIN TECHNOLOGIES INTERNAT
Name: food, dtype: object
```