```
import pandas as pd

team = [1, 1, 2, 2, 2, 1, 2, 1, 1, 2, 3, 3, 2, 3, 3]

name = ['Воронюк', 'Денисенко', 'Дуплій', 'Іванов', 'Капітан',
        'Карпова', 'Кіріенко', 'Коваленко', 'Луговий', 'Петренко',
        'Петров', 'Савчук', 'Сорокіна', 'Старчук', 'Шульга']

category = [4, 5, 6, 6, 4, 5, 5, 6, 4, 4, 5, 5, 5, 6, 6]

days = [24, 26, 20, 24, 25, 25, 26, 24, 20, 27, 12, 24, 24, 23, 24]

total = [600.0, 840.0, 800.0, 960.0, 650.0, 780.0, 840.0, 960.0, 500.0,
         750.0, 360.0, 720.0, 720.0, 920.0, 960.0]

df = pd.DataFrame( data = {
              'team': team,
              'name': name,
              'category': category,
              'days': days,
              'total': total
       })

df
```

	team	name	category	days	total
0	1	Воронюк	4	24	600.0
1	1	Денисенко	5	26	840.0
2	2	Дуплій	6	20	800.0
3	2	Іванов	6	24	960.0
4	2	Капітан	4	25	650.0
5	1	Карпова	5	25	780.0
6	2	Кіріенко	5	26	840.0
7	1	Коваленко	6	24	960.0
8	1	Луговий	4	20	500.0
9	2	Петренко	4	27	750.0
10	3	Петров	5	12	360.0
11	3	Савчук	5	24	720.0
12	2	Сорокіна	5	24	720.0
13	3	Старчук	6	23	920.0
14	3	Шульга	6	24	960.0

```
df['team'].value_counts()
```

```
2    6
1    5
3    4
Name: team, dtype: int64
```

```
df['team'].value_counts().sort_index()
```

```
1    5
2    6
3    4
Name: team, dtype: int64
```

```
df.groupby('team')['total'].sum()
```

```
team
1    3680.0
2    4720.0
3    2960.0
Name: total, dtype: float64
```

```
df.groupby('team')[['total', 'days']].sum()
```

team	total	days
1	3680.0	119
2	4720.0	146
3	2960.0	83

```
df.groupby('team')[['total', 'days']].mean()
```

team	total	days
1	736.000000	23.800000
2	786.666667	24.333333
3	740.000000	20.750000

```
df.groupby('team')[['total', 'days']].sum().sort_values('total', ascending=False)
```

team	total	days
2	4720.0	146
1	3680.0	119
3	2960.0	83

```
df.pivot_table(values='total', index='team', columns='category', aggfunc='sum', fill_value=0)
```

category	4	5	6
team			
1	1100	1620	960
2	1400	1560	1760
3	0	1080	1880

```
df.pivot_table(values='total', index='team', columns='category',
               aggfunc='sum', fill_value=0, margins=True)
```

category	4	5	6	All
team				
1	1100	1620	960	3680.0
2	1400	1560	1760	4720.0
3	0	1080	1880	2960.0
All	2500	4260	4600	11360.0

```
df.pivot_table(values='total', index='team', columns='category',
               aggfunc='mean', fill_value=0, margins=True)
```

category	4	5	6	All
team				
1	550	810	960	736.000000
2	700	780	880	786.666667
3	0	540	940	740.000000
All	625	710	920	757.333333

```
df.pivot_table(values='total', index='team', columns='category',
               aggfunc=['sum', 'mean'], fill_value=0, margins=True)
```

	sum				mean			
category	4	5	6	All	4	5	6	All
team								
1	1100	1620	960	3680.0	550	810	960	736.000000
2	1400	1560	1760	4720.0	700	780	880	786.666667
3	0	1080	1880	2960.0	0	540	940	740.000000
All	2500	4260	4600	11360.0	625	710	920	757.333333