

```
In [159]: 1 # Naudingumo balai per rungtynes NBPG
2 ns['NBPG']=ns['Points per game']+ns['Rebounds per game']+ns['Assists per game']+ns['Steals per game']
3 + ns['Blocks per game']-ns['Turnovers per game']-ns['PMPG']
4 ns.head(5)
```

```
Out[159]:
```

	FULL NAME	GP	FTA	FT%	2PA	2P%	3PA	3P%	Points per game	Rebounds per game	Assists per game	Steals per game	Blocks per game	Turnovers per game	Salary	PMPG
0	Aaron Brooks	32	11	0.727	38	0.447	31	0.355	2.3	0.5	0.6	0.19	0.00	0.34	2116955.0	1.3
1	Aaron Gordon	58	225	0.698	523	0.497	342	0.336	17.6	7.9	2.3	1.02	0.78	1.84	5504420.0	1.8
4	Abdel Nader	48	39	0.590	84	0.321	65	0.354	3.0	1.5	0.5	0.31	0.21	0.71	1167333.0	1.3
6	Al Horford	72	120	0.783	527	0.514	226	0.429	12.9	7.4	4.7	0.60	1.08	1.83	2773440.0	1.8
7	Al Jefferson	36	36	0.833	205	0.541	3	0.000	7.0	4.0	0.8	0.44	0.64	0.58	9769.0	1.3

```
In [160]: 1 # Vieno naudingumo balo kaina
2 # ALga / suzaistos rungtynės / naudingumo balai per rungtynes
3 ns['NB$']=(ns['Salary']/ns['GP']/ns['NBPG']).round(2)
4 ns.head(2)
```

```
Out[160]:
```

	FULL NAME	GP	FTA	FT%	2PA	2P%	3PA	3P%	Points per game	Rebounds per game	Assists per game	Steals per game	Blocks per game	Turnovers per game
0	Aaron Brooks	32	11	0.727	38	0.447	31	0.355	2.3	0.5	0.6	0.19	0.00	0.34
1	Aaron Gordon	58	225	0.698	523	0.497	342	0.336	17.6	7.9	2.3	1.02	0.78	1.84

```
In [179]: 1 # Vidurkis visos lygos vieno naudingumo balo kainos NB$nba
2 ns['NB$nba']=((ns['Salary'].sum()/(ns['NBPG'].sum()/581)/(ns['GP'].sum()))).round(2)
3 ns
```

```
In [151]: 1 # Sujungiame lenteles
2 ns = pd.merge(nba_atrinkta, salary, on = 'FULL NAME', how='left')
```

```
In [152]: 1 ns.head(2)
```

```
Out[152]:
```

	FULL NAME	GP	FTA	FT%	2PA	2P%	3PA	3P%	Points per game	Rebounds per game	Assists per game	Steals per game	Blocks per game	Turnovers per game
0	Aaron Brooks	32	11	0.727	38	0.447	31	0.355	2.3	0.5	0.6	0.19	0.00	0.34
1	Aaron Gordon	58	225	0.698	523	0.497	342	0.336	17.6	7.9	2.3	1.02	0.78	1.84

```
In [153]: 1 # Panaikiname tuščias algų eilutes
2 ns=ns[ns['Salary'].notna()]
3 ns.head(2)
```

```
Out[153]:
```

	FULL NAME	GP	FTA	FT%	2PA	2P%	3PA	3P%	Points per game	Rebounds per game	Assists per game	Steals per game	Blocks per game	Turnovers per game
0	Aaron Brooks	32	11	0.727	38	0.447	31	0.355	2.3	0.5	0.6	0.19	0.00	0.34
1	Aaron Gordon	58	225	0.698	523	0.497	342	0.336	17.6	7.9	2.3	1.02	0.78	1.84

```
In [154]: 1 # Panaikiname tuščias vardų eilutes
```

visos NBA fone atrodo lietuvaičiai

```
pandas as pd
numpy as np
```

```
nba=pd.read_csv('visi duomenys apie žaidėją.csv')
```

```
nba.head(3)
```

	FULL NAME	TEAM	POS	AGE	GP	MPG	MIN%	USG%	TOr	FTA	...	Rebounds per game	TRB%	Assists per game	Steals per game	Blocks per game	Turnovers per game	VI	ORTG	DRTG	AST%
0	Aaron Brooks	Min	PG	33.0	32	5.9	12.3	19.8	0.130	11	...	0.5	5.2	0.6	0.19	0.00	0.34	6.0	103.1	100.4	15.0
1	Aaron Gordon	Orl	SF	22.0	58	32.9	68.6	24.7	0.100	225	...	7.9	13.2	2.3	1.02	0.78	1.84	8.3	103.6	106.2	11.7
2	Aaron Harrison	Dal	SG	23.0	9	25.9	54.0	15.5	0.038	17	...	2.7	5.7	1.2	1.00	0.22	0.33	4.3	87.9	100.8	6.7

3 rows x 28 columns

```
In [148]: 1 nba.info()
```

```
0 MIN%      605 non-null float64
7 USG%      605 non-null float64
8 TOr       601 non-null float64
9 FTA       605 non-null int64
```

```
Length: 360, dtype: object
```

```
ns[ns['FULL NAME'][(ns['NB$']>ns['NB$nba'])]]
```

```
Aaron Brooks
Al Horford
Al Jefferson
Alan Williams
Alec Burks
...
Udonis Haslem
Vince Carter
Wesley Matthews
Willie Reed
Zhou Qi
Name: FULL NAME, Length: 221, dtype: object
```

```
1 # Kokių kontraktų nusipelnė žaidėjai sekančiam sezonui 'Salary 18/19'
2 ns['Salary 18/19']=(ns['NB$nba'] * ns['NBPG'] * ns['GP']).round()
3 ns[['FULL NAME', 'Salary', 'Salary 18/19']]
```

```
[209]:
```

	FULL NAME	Salary	Salary 18/19
0	Aaron Brooks	2116955.0	1131154.0
1	Aaron Gordon	5504420.0	16458848.0
4	Abdel Nader	1167333.0	2509650.0