

# Практическая работа №6

```
In [19]: import numpy as np
import pandas as pd

df = pd.read_csv('../football.csv')

A = max(df['Composure'])
B = max(df['Reactions'])
M=[]
c = map(lambda x,y: x>=0.9*A and y>=0.9*B, df['Composure'],df['Reactions'])
c=list(c)
for i in range(len(c)):
    if c[i] == True:
        M.append(df['Age'][i])

print(min(M))
```

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# Практическая работа №7

## задание А

```
In [80]: import numpy as np
import pandas as pd

df = pd.read_csv('../StudentsPerformance.csv')

g = list(map(lambda x,y,z: x == 'female' and y == "master's degree"
               and z>90, df['gender'], df['parental level of education'], df['math score']))
```

```
In [81]: c = filter(lambda x: x == True, g)
print(len(list(c)), 'девочки получившие больше 90 баллов по математике и родители имеют ст
```

2 девочки получившие больше 90 баллов по математике и родители имеют степень баклавра

```
In [26]: df
```

Out[26]:

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
0	female	group B	bachelor's degree	standard	none	72	72	74
1	female	group C	some college	standard	completed	69	90	88
2	female	group B	master's degree	standard	none	90	95	93
3	male	group A	associate's degree	free/reduced	none	47	57	44
4	male	group C	some college	standard	none	76	78	75
...	...	...	...	...	...	...	...	...
995	female	group E	master's degree	standard	completed	88	99	95
996	male	group C	high school	free/reduced	none	62	55	55
997	female	group C	high school	free/reduced	completed	59	71	65

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
998	female	group D	some college	standard	completed	68	78	77
999	female	group D	some college	free/reduced	none	77	86	86

1000 rows × 8 columns

## задание В

In [79]:

```
import numpy as np
import pandas as pd

def edge(row):
    if (row[0] == 'female' and row[6]>50) or (row[0] == 'male' and row[7]>50):
        return 'good'
    else:
        return 'bad'

df = pd.read_csv('../StudentsPerformance.csv')
lvl_ed=[]

lvl_ed = map(lambda x: edge(list(df.iloc[x])), range(len(df['gender'])))

df['last'] = list(lvl_ed)
df
```

Out[79]:

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score	last
0	female	group B	bachelor's degree	standard	none	72	72	74	good
1	female	group C	some college	standard	completed	69	90	88	good
2	female	group B	master's degree	standard	none	90	95	93	good
3	male	group A	associate's degree	free/reduced	none	47	57	44	bad
4	male	group C	some college	standard	none	76	78	75	good
...	...	...	...	...	...	...	...	...	...
995	female	group E	master's degree	standard	completed	88	99	95	good
996	male	group C	high school	free/reduced	none	62	55	55	good
997	female	group C	high school	free/reduced	completed	59	71	65	good
998	female	group D	some college	standard	completed	68	78	77	good
999	female	group D	some college	free/reduced	none	77	86	86	good

1000 rows × 9 columns

In [ ]: