



# Матрицы



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Строки

Столбцы

```
int x[3][3]
```

a[0][0]	a[0][1]	a[0][2]	a[0][3]	...	a[0][n]
a[1][0]	a[1][1]	a[1][2]	a[1][3]	...	a[1][n]
a[2][0]	a[2][1]	a[2][2]	a[2][3]	...	a[2][n]
...	...	...	...	...	...
a[m][0]	a[m][1]	a[m][2]	a[m][3]	...	a[m][n]



# Работа с двумерным массивом (матрица)

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
int main()
{
    srand(time(NULL));
    const int N_size = 5;

    double arr2D[N_size][N_size];

    for (int i = 0; i < N_size; ++i)
        for (int j = 0; j < N_size; ++j)
            arr2D[i][j] = (double)rand()/RAND_MAX;

    for (int i = 0; i < N_size; ++i) {
        for (int j = 0; j < N_size; ++j) {
            printf("%lf\t", arr2D[i][j]);
        }
        printf("\n");
    }

    return 0;
}
```

0.003540	0.144292	0.518174	0.644612	0.112522
0.893094	0.320139	0.267342	0.636525	0.708853
0.016297	0.828547	0.763817	0.615070	0.271126
0.629963	0.202734	0.145573	0.006989	0.832850
0.185034	0.959044	0.685904	0.237129	0.252754