

Журнал команд

```
array1=1:5
array2=5:10:100
array3=100:1
array3=100:-10:1
M=[1,2,3]
A=[3 4 66 11;44 11 55 33; 10 15 100]
A=[3 4 66 11;44 11 55 33; 10 15 100 523]
B=[1 2; 3 4]
A(3,:)
B(:,2)
A(2,:)=[]
C=A(1:2,2:3)
a=C(:)
b=a(1:2)
a(1)=[]
A=[0 2; 4 6];
B=[8 10; 12 14];
((A/11)+3)+B^2
n=A/B
m=B/C
l=A*B
matrix(A,2,2)
matrix(A,4,1)
matrix(B,1,4)
ones(1,19)
ones(5,5)
eye(10,10)
zeros(2,2)
D=eye(ans)
rang(3,3)
rand(3,3)
rand(10,5,10)
full(D)
full(rand(10,5,10))
full(rand(10,5,10))
E=[15,30,45,60];
diag(E)
diag(E,4)
[n,m]=size(C)
max(C)
C=(1 2 3; 4 5 6;7 8 9);
C=[1 2 3; 4 5 6;7 8 9];
max(C)
min(C)
sum(c)
sum(C)
det(C)
rank(C)
qr(C)
F='aa' 'bb';'cc' 'dd'
F=['aa' 'bb';'cc' 'dd']
F=['aa' 'bb'; 'cc' 'dd']
G=[q' w ; e' r]
F+G
```

```
A+F+G
G+F
F+F+F+G+F+G+G
A=[10 20 30; 40 50 60; 70 80 90];
B=[1; 2; 3]
B=[1; 2; 3];
inv(A)*B
C=rref([A B]);
[n,m]=size(C);
ovt=C(n,:)
```

```
--> array1=1:5
array1 =
1. 2. 3. 4. 5.

--> array2=5:10:100
array2 =
column 1 to 6
5. 15. 25. 35. 45. 55.

column 7 to 10
65. 75. 85. 95.

--> array3=100:-10:1
array3 =
[]

--> array3=100:-10:1
array3 =
column 1 to 6
100. 90. 80. 70. 60. 50.

column 7 to 10
40. 30. 20. 10.
```

```
--> M=[1,2,3]
M =
1.    2.    3.

--> A=[3 4 66 11;44 11 55 33; 10 15 100]
несовпадающие размеры строки/столбца

--> A=[3 4 66 11;44 11 55 33; 10 15 100 523]
A =
3.    4.    66.    11.
44.    11.    55.    33.
10.    15.    100.    523.

--> B=[1 2; 3 4]
B =
1.    2.
3.    4.

--> A(3,:)
ans =
10.    15.    100.    523.

--> B(:,2)
ans =
2.
4.
```

```
--> A(2,:)=[]
A =
3.      4.      66.     11.
10.     15.     100.    523.

--> C=A(1:2,2:3)
C =
4.      66.
15.     100.

--> a=C(:)
a =
4.
15.
66.
100.

--> b=a(1:2)
b =
4.
15.

--> a(1)=[]
a =
15.
66.
100.

--> A=[0 2; 4 6];
--> B=[8 10; 12 14];
```

```
--> ((A/11)+3)+B^2
ans =
187.      223.18182
267.36364  319.54545

--> n=A/B
n =
3. -2.
2. -1.

--> m=B/C
m =
-1.1016949  0.8271186
-1.6779661  1.2474576

--> l=A*B
l =
24.    28.
104.   124.

--> matrix(A,2,2)
ans =
0.    2.
4.    6.
```

```
--> matrix(A, 4, 1)
ans  =
0.
4.
2.
6.

--> matrix(B, 1, 4)
ans  =
8.    12.    10.    14.

--> ones(1,19)
ans  =

column 1 to 7
1.    1.    1.    1.    1.    1.    1.

column 8 to 14
1.    1.    1.    1.    1.    1.    1.

column 15 to 19
1.    1.    1.    1.    1.

--> ones(5,5)
ans  =

1.    1.    1.    1.    1.
1.    1.    1.    1.    1.
1.    1.    1.    1.    1.
1.    1.    1.    1.    1.
1.    1.    1.    1.    1.
```

```
--> eye(10,10)
ans  =

          column 1 to 8

1.  0.  0.  0.  0.  0.  0.  0.
0.  1.  0.  0.  0.  0.  0.  0.
0.  0.  1.  0.  0.  0.  0.  0.
0.  0.  0.  1.  0.  0.  0.  0.
0.  0.  0.  0.  1.  0.  0.  0.
0.  0.  0.  0.  0.  1.  0.  0.
0.  0.  0.  0.  0.  0.  1.  0.
0.  0.  0.  0.  0.  0.  0.  1.
0.  0.  0.  0.  0.  0.  0.  0.
0.  0.  0.  0.  0.  0.  0.  0.

          column 9 to 10

0.  0.
0.  0.
0.  0.
0.  0.
0.  0.
0.  0.
0.  0.
1.  0.
0.  1.

--> zeros(2,2)
ans  =

0.  0.
0.  0.
```

```
--> D=eye(ans)
D =
1. 0.
0. 1.

--> rang(3,3)
Неопределённая переменная: rang

--> rand(3,3)
ans =
0.2113249  0.3303271  0.8497452
0.7560439  0.6653811  0.685731
0.0002211  0.6283918  0.8782165

--> rand(10,5,10)
ans =
(:,:,1)

column 1 to 3

0.068374  0.6525135  0.5935095
0.5608486  0.3076091  0.5015342
0.6623569  0.9329616  0.4368588
0.7263507  0.2146008  0.2693125
0.1985144  0.312642   0.6325745
0.5442573  0.3616361  0.4051954
0.2320748  0.2922267  0.9184708
0.2312237  0.5664249  0.0437334
0.2164633  0.4826472  0.4818509
0.8833888  0.3321719  0.2639556
```

```
    column 4 to 5

0.4148104  0.4062025
0.2806498  0.4094825
0.1280058  0.8784126
0.7783129  0.113836
0.211903   0.1998338
0.1121355  0.5618661
0.6856896  0.5896177
0.1531217  0.685398
0.6970851  0.8906225
0.8415518  0.5042213
(:,:,2)
```

```
    column 1 to 3
```

```
0.3493615  0.5253563  0.8300317
0.3873779  0.537623   0.587872
0.9222899  0.1199926  0.4829179
0.9488184  0.2256303  0.2232865
0.3435337  0.6274093  0.8400886
0.3760119  0.7608433  0.1205996
0.7340941  0.0485566  0.2855364
0.2615761  0.672395   0.8607515
0.4993494  0.2017173  0.8494102
0.2638578  0.3911574  0.5257061
```

```
    column 4 to 5
```

```
0.993121   0.9262344
0.6488563  0.5667211
0.9923191  0.5711639
0.050042   0.816011
0.7485507  0.0568928
0.4104059  0.5595937
0.6084526  0.124934
0.8544211  0.7279222
0.0642647  0.2677766
0.8279083  0.5465335
```

column 1 to 3

0.9885408	0.3320095	0.3454984
0.7395657	0.025871	0.7064868
0.0037173	0.5174468	0.5211472
0.5900573	0.3916873	0.2870401
0.3096467	0.2413538	0.6502795
0.2552206	0.5064435	0.0881335
0.6251879	0.4236102	0.4498763
0.1157417	0.2893728	0.7227253
0.6117004	0.0887932	0.8976796
0.6783956	0.6212882	0.2427822

column 4 to 5

0.4337721	0.8187066
0.9677053	0.4256872
0.5068534	0.2461561
0.5232976	0.9229532
0.5596948	0.1000746
0.5617307	0.4678218
0.468176	0.3950498
0.7794547	0.0366117
0.7901072	0.5175369
0.9808542	0.8325452

(:,:,4)

column 1 to 3

0.6104832	0.9414957	0.3599928
0.1871112	0.2124056	0.6912788
0.0189575	0.579502	0.7656859
0.8433565	0.2628148	0.357265
0.0748595	0.4360987	0.76934
0.8532815	0.9110545	0.5477634
0.012459	0.8082667	0.0962289
0.1867539	0.8102653	0.9561172
0.4920584	0.2590428	0.2207409
0.7489608	0.4139087	0.0143259

```
--> full(D)
ans  =
1.  0.
0.  1.

--> full(rand(10,5,10)
full(rand(10,5,10)
      ^
Ошибка: syntax error, unexpected end of file, expecting "," or )

--> full(rand(10,5,10))
ans  =
(:,:,1)

column 1 to 3

0.2042602  0.7528714  0.115221
0.8310431  0.051723   0.4862681
0.0122163  0.5958625  0.7671583
0.4884462  0.3833705  0.088053
0.9549877  0.490022   0.7008561
0.0587431  0.5272795  0.1879139
0.8258465  0.0688945  0.2017886
0.2980742  0.8843078  0.4062821
0.077576   0.7191294  0.4096657
0.5846092  0.069426   0.1769565
```

column 4 to 5

0.3312931	0.9424792
0.0518477	0.6817725
0.4149242	0.2734241
0.7221236	0.2071775
0.0774625	0.1937939
0.5855878	0.6797838
0.3707945	0.5883657
0.2116117	0.9331754
0.1903269	0.5509123
0.5607954	0.8040547

(:,:,2)

column 1 to 3

0.107449	0.7006579	0.4498859
0.7403925	0.8870612	0.7707574
0.5610332	0.6979769	0.2435224
0.7661155	0.6798991	0.2126115
0.7830659	0.361594	0.1099234
0.1438831	0.2673998	0.6981481
0.1647192	0.0773687	0.4150906
0.3177414	0.14941	0.5029819
0.5026596	0.3201839	0.7511607
0.6920496	0.2026055	0.9940147

column 4 to 5

0.1828762	0.876191
0.3021917	0.0373321
0.3785486	0.4293466
0.7153199	0.3157233
0.9524154	0.3682477
0.4703919	0.1458774
0.1870942	0.6768379
0.2557188	0.5261979
0.4435066	0.4003626
0.7234078	0.0029108

```
    column 1 to 3

0.3068181  0.5738658  0.4588491
0.7902694  0.3492018  0.4720517
0.957795   0.7067298  0.0623731
0.6689271  0.3599201  0.0854401
0.2929616  0.4052311  0.0134564
0.8223899  0.6140811  0.3543002
0.0179846  0.6524047  0.6719395
0.8710701  0.0295171  0.1360619
0.3181024  0.5668896  0.2119744
0.5724473  0.7114017  0.4015942

    column 4 to 5

0.4036219  0.6799288
0.5628382  0.9514125
0.5531093  0.1206901
0.0768984  0.731891
0.5360758  0.0831662
0.0900212  0.8021909
0.6218026  0.0290492
0.0001215  0.6502991
0.7219727  0.7427882
0.6661293  0.2176611
(:, :, 4)

    column 1 to 3

0.9788486  0.0370717  0.9150032
0.8925237  0.6404148  0.617261
0.3511275  0.4130743  0.9964195
0.4745619  0.8396902  0.0468599
0.7699462  0.0002195  0.9245926
0.0734342  0.5085374  0.9689865
0.5894619  0.4754997  0.491629
0.2378993  0.9625065  0.2977053
0.4076361  0.9798011  0.0603055
0.4304818  0.0785698  0.6313472
```

column 4 to 5

0.024103	0.8426717
0.1527438	0.9029165
0.9481178	0.4409482
0.2744266	0.8332359
0.4794727	0.7233976
0.4855768	0.437715
0.6764004	0.3080607
0.832125	0.8749813
0.0125876	0.5355882
0.545378	0.3085999

(:,:,5)

column 1 to 3

0.3354632	0.2780528	0.8568082
0.2342486	0.9583482	0.1993437
0.2589412	0.0156363	0.7131302
0.8521509	0.2964352	0.5208952
0.4821739	0.4685935	0.9311723
0.6095218	0.4262021	0.4143836
0.9872823	0.4217656	0.5980196
0.9811427	0.1034854	0.5549106
0.3303114	0.4279759	0.8552953
0.3589146	0.7860729	0.3097751

column 4 to 5

0.9446128	0.2161568
0.244268	0.3420198
0.8760447	0.4300938
0.4874215	0.6261753
0.3844019	0.9554251
0.0922345	0.4541551
0.0705419	0.0029223
0.7338807	0.0106921
0.7792181	0.9746371

```
--> E=[15,30,45,60];

--> diag(E)
ans  =

15.    0.    0.    0.
0.    30.    0.    0.
0.    0.    45.    0.
0.    0.    0.    60.

--> diag(E,4)
ans  =

column 1 to 7

0.    0.    0.    0.    15.    0.    0.
0.    0.    0.    0.    0.    30.    0.
0.    0.    0.    0.    0.    0.    45.
0.    0.    0.    0.    0.    0.    0.
0.    0.    0.    0.    0.    0.    0.
0.    0.    0.    0.    0.    0.    0.
0.    0.    0.    0.    0.    0.    0.

column 8

0.
0.
0.
60.
0.
0.
0.
0.
```

```
--> [n,m)=size(C)
    > max(C)
    > C=(1 2 3; 4 5 6;7 8 9];
[n,m)=size(C)
    ^^
Ошибка: syntax error, unexpected )

--> C=(1 2 3; 4 5 6;7 8 9];
C=(1 2 3; 4 5 6;7 8 9];
    ^^
Ошибка: syntax error, unexpected integer

--> C=[1 2 3; 4 5 6;7 8 9];

--> max(C)
ans  =
    9.

--> min(C)
ans  =
    1.

--> sum(c)

Неопределённая переменная: c

--> sum(C)
ans  =
    45.
```

```
--> det(C)
ans  =
6.661D-16

--> rank(C)
ans  =
2.

--> qr(C)
ans  =
-0.1230915  0.904534   0.4082483
-0.492366   0.3015113  -0.8164966
-0.8616404  -0.3015113  0.4082483

--> F='aa' 'bb';'cc' 'dd']
F='aa' 'bb';'cc' 'dd']
^~~~~^
Ошибка: syntax error, unexpected string, expecting end of file

--> F=['aa' 'bb';'cc' 'dd']
F =
!aa  bb  !
!      !
!cc  dd  !

--> F=['aa' 'bb'; 'cc' 'dd']
F =
!aa  bb  !
!      !
!cc  dd  !
```

```
--> G=['q' 'w' ; 'e' 'r']
```

```
G =
```

```
!q w !
!
!e r !
```

```
--> F+G
```

```
ans =
```

```
!aaq bbw !
!
!cce ddr !
```

```
--> A+F+G
```

Неопределённая операция для указанных operandов.

проверьте или определите функцию %s_a_c для перегрузки.

```
--> G+F
```

```
ans =
```

```
!qaa wbb !
!
!ecc rdd !
```

```
--> F+F+F+G+F+G+G
```

```
ans =
```

```
!aaaaaaaaaaqqq bbbbbbbwbbww !
!
!ccccccccccee dddddddrddrr !
```

```
--> A=[10 20 30; 40 50 60; 70 80 90];

--> B=[1; 2; 3]
B  =
1.
2.
3.

--> B=[1; 2; 3];

--> inv(A)*B
Предупреждение:
матрица близка к сингулярной или плохо масштабирована. rcond = 7.4015E-18
ans =
0.
-0.125
0.0625

--> C=rref([A B]);

--> [n,m]=size(C);

--> ovt=C(n,:);
ovt =
0.    0.    0.    0.
```