

```

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
I=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=100:1
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.
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.  
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 операндов.
проверьте или определите функцию %s_a_c для перегрузки.

```
--> G+F  
ans =
```

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

```
--> F+F+F+G+F+G+G  
ans =
```

```
!aaaaaaqaaqq bbbbbbwwbbww !  
!               !  
!cccccccceee ddddddrrddrr !
```

```
--> 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.
```