1 Dimentional single operation:

```
A=rand(1,1)
```

```
A = 0.8541
```

```
B=randi([1,100],1,1)
```

```
B = 46
```

```
A+B
```

```
ans = 46.8541
```

```
A-B
```

```
ans = -45.1459
```

```
A*B
```

```
ans = 39.2876
```

```
A/B
```

```
ans = 0.0186
```

```
A^B
```

```
ans = 7.0610e-04
```

```
A>B
```

```
ans = logical
   0
```

```
A<B
```

```
ans = logical
   1
```

```
A>=B
```

```
ans = logical
   0
```

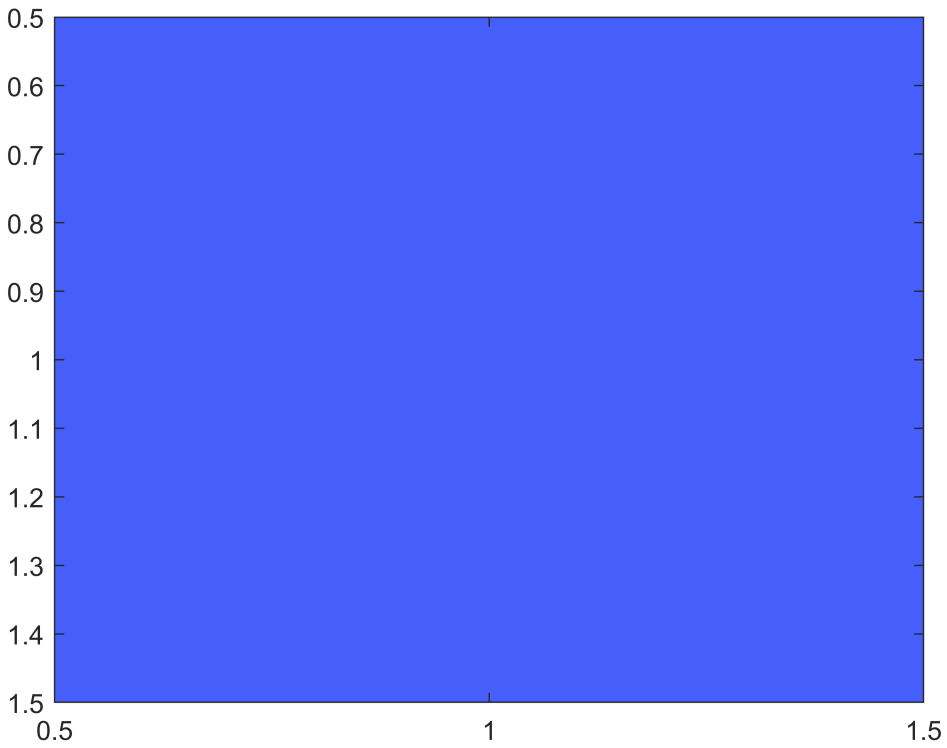
```
A<=B
```

```
ans = logical
   1
```

```
A==B
```

```
ans = logical
   0
```

```
sound(A)
image(B)
```



2 Dimentional single operation:

```
A2=randi([1,100],3,3)
```

```
A2 = 3×3
    68    58    84
    86    27    94
    77    92    89
```

```
B2=rand(3,3)
```

```
B2 = 3×3
    0.7646    0.2982    0.0441
    0.6079    0.7213    0.3425
    0.7477    0.9015    0.2384
```

```
A2+B2
```

```
ans = 3×3
   68.7646   58.2982   84.0441
   86.6079   27.7213   94.3425
   77.7477   92.9015   89.2384
```

```
A2-B2
```

```
ans = 3×3
   67.2354   57.7018   83.9559
   85.3921   26.2787   93.6575
```

```
   76.2523   91.0985   88.7616
```

```
A2*B2
```

```
ans = 3×3
  150.0526  137.8333   42.8867
  152.4463  129.8564   35.4468
  181.3407  169.5473   56.1199
```

```
A2/B2
```

```
ans = 3×3
   29.8591  459.3304 -313.0490
  111.7711  598.0399 -485.5156
   -6.6114  424.6628 -235.5305
```

```
A2>B2
```

```
ans = 3×3 logical array
   1   1   1
   1   1   1
   1   1   1
```

```
A2<B2
```

```
ans = 3×3 logical array
   0   0   0
   0   0   0
   0   0   0
```

```
A2==B2
```

```
ans = 3×3 logical array
   0   0   0
   0   0   0
   0   0   0
```

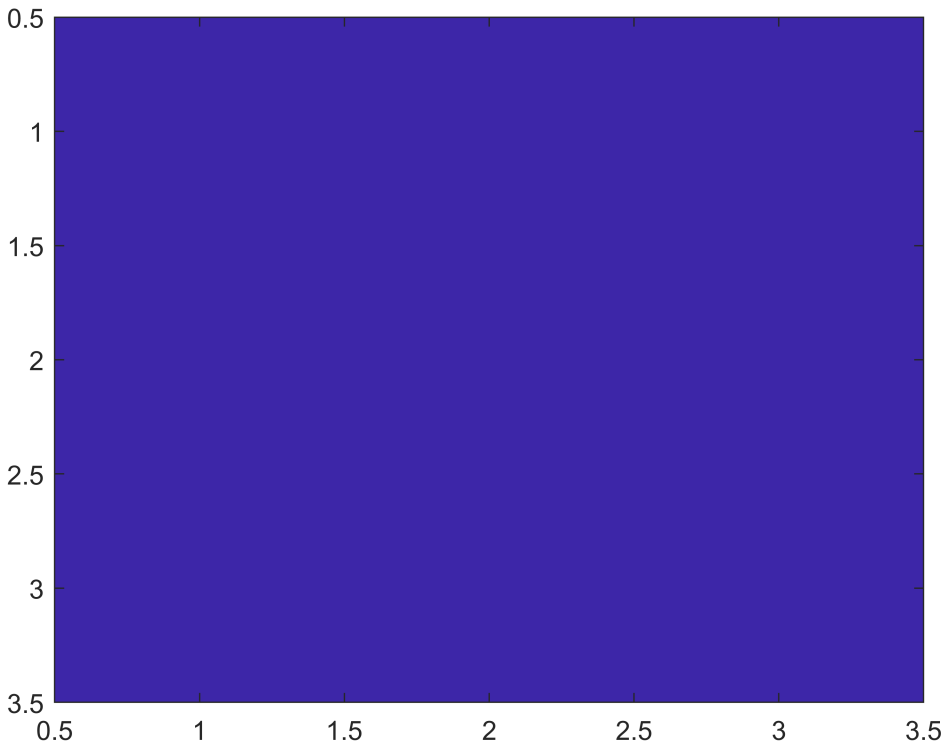
```
A2<=B2
```

```
ans = 3×3 logical array
   0   0   0
   0   0   0
   0   0   0
```

```
A2>=B2
```

```
ans = 3×3 logical array
   1   1   1
   1   1   1
   1   1   1
```

```
sound(A)
image(F2)
```



3 Dimentional single operation:

```
A4(:,:,1)=rand(4,4)
```

```
A4 =
A4(:,:,1) =

    0.5399    0.3214    0.8017    0.2048
    0.4912    0.6489    0.3782    0.6814
    0.0197    0.8099    0.8089    0.6205
    0.8819    0.9215    0.0392    0.8625


A4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


A4(:,:,3) =

    13    73   156   158
   184    97   105    71
    37     5   141    42
    94    34   139   134
```

```
A4(:,:,3)=randi([1,200],4,4)
```

```
A4 =
A4(:,:,1) =

    0.5399    0.3214    0.8017    0.2048
    0.4912    0.6489    0.3782    0.6814
    0.0197    0.8099    0.8089    0.6205
    0.8819    0.9215    0.0392    0.8625


A4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


A4(:,:,3) =

    92   178   109   134
   181    66    15   121
    27    40   140    75
    41    54   128   107
```

```
B4(:,:,1)=randi([1,6764],4,4)
```

```
B4 =
B4(:,:,1) =

        2109        3788        6319        5995
        1274        4659        4740        3175
        5813        5326        4899        6138
        3057        5408        1316        3662


B4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


B4(:,:,3) =

    0.2197    0.1086    0.6223    0.1655
    0.6552    0.5039    0.2887    0.2113
    0.6803    0.6042    0.0389    0.6749
    0.0691    0.0726    0.4348    0.6586
```

```
B4(:,:,3)=rand(4,4)
```

```
B4 =
B4(:,:,1) =

        2109        3788        6319        5995
        1274        4659        4740        3175
        5813        5326        4899        6138
        3057        5408        1316        3662


B4(:,:,2) =
```

```
     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


B4(:,:,3) =

    0.1491    0.2403    0.3534    0.7918
    0.8678    0.1364    0.5380    0.2484
    0.7474    0.7880    0.4018    0.4620
    0.7702    0.8875    0.0978    0.2854
```

A4+B4

```
ans =
ans(:,:,1) =

   1.0e+03 *

    2.1095    3.7883    6.3198    5.9952
    1.2745    4.6596    4.7404    3.1757
    5.8130    5.3268    4.8998    6.1386
    3.0579    5.4089    1.3160    3.6629


ans(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


ans(:,:,3) =

   92.1491  178.2403  109.3534  134.7918
  181.8678   66.1364   15.5380  121.2484
   27.7474   40.7880  140.4018   75.4620
   41.7702   54.8875  128.0978  107.2854
```

A4-B4

```
ans =
ans(:,:,1) =

   1.0e+03 *

   -2.1085   -3.7877   -6.3182   -5.9948
   -1.2735   -4.6584   -4.7396   -3.1743
   -5.8130   -5.3252   -4.8982   -6.1374
   -3.0561   -5.4071   -1.3160   -3.6611


ans(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


ans(:,:,3) =
```

```
   91.8509  177.7597  108.6466  133.2082
  180.1322   65.8636   14.4620  120.7516
   26.2526   39.2120  139.5982   74.5380
   40.2298   53.1125  127.9022  106.7146
```

A4.*B4

```
ans =
ans(:,:,1) =

   1.0e+03 *

    1.1387    1.2176    5.0661    1.2279
    0.6258    3.0231    1.7925    2.1635
    0.1144    4.3137    3.9626    3.8086
    2.6958    4.9834    0.0516    3.1584


ans(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


ans(:,:,3) =

   13.7209   42.7789   38.5182  106.1037
  157.0717    9.0043    8.0699   30.0544
   20.1798   31.5202   56.2463   34.6476
   31.5780   47.9273   12.5247   30.5395
```

A4./B4

```
ans =
ans(:,:,1) =

   1.0e-03 *

    0.2560    0.0849    0.1269    0.0342
    0.3855    0.1393    0.0798    0.2146
    0.0034    0.1521    0.1651    0.1011
    0.2885    0.1704    0.0298    0.2355


ans(:,:,2) =

   NaN   NaN   NaN   NaN
   NaN   NaN   NaN   NaN
   NaN   NaN   NaN   NaN
   NaN   NaN   NaN   NaN


ans(:,:,3) =

   1.0e+03 *

    0.6169    0.7406    0.3085    0.1692
    0.2086    0.4838    0.0279    0.4871
    0.0361    0.0508    0.3485    0.1623
    0.0532    0.0608    1.3081    0.3749
```

A4==B4

```
ans = 4×4×3 logical array
ans(:,:,1) =

   0   0   0   0
   0   0   0   0
   0   0   0   0
   0   0   0   0


ans(:,:,2) =

   1   1   1   1
   1   1   1   1
   1   1   1   1
   1   1   1   1


ans(:,:,3) =

   0   0   0   0
   0   0   0   0
   0   0   0   0
   0   0   0   0
```

A4>=B4

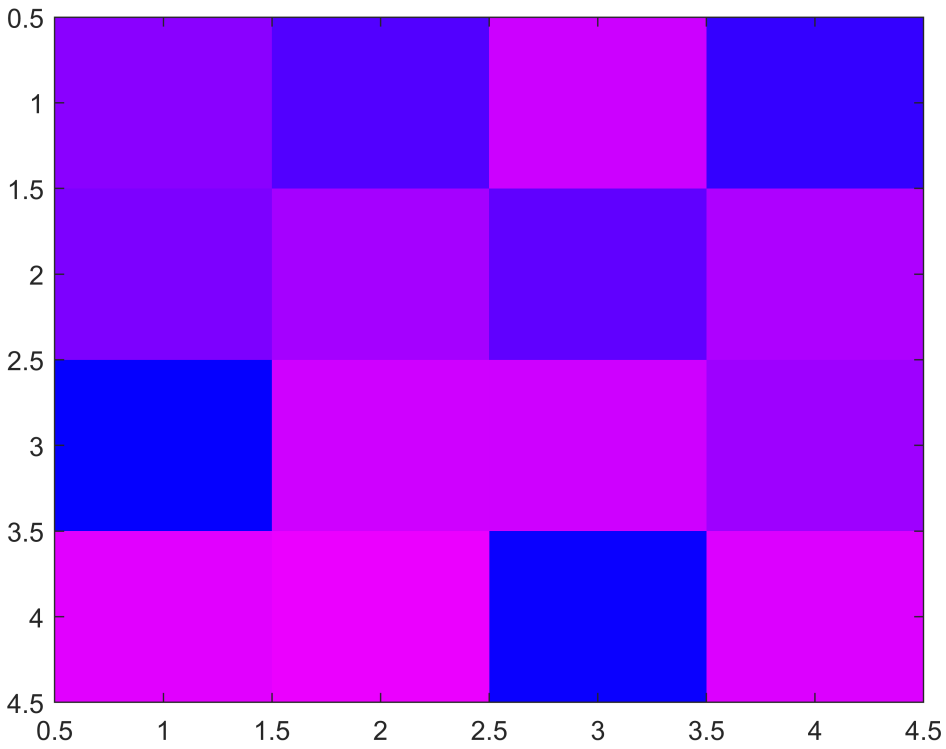
```
ans = 4×4×3 logical array
ans(:,:,1) =

   0   0   0   0
   0   0   0   0
   0   0   0   0
   0   0   0   0


ans(:,:,2) =

   1   1   1   1
   1   1   1   1
   1   1   1   1
   1   1   1   1


ans(:,:,3) =

   1   1   1   1
   1   1   1   1
   1   1   1   1
   1   1   1   1
```

A4<=B4

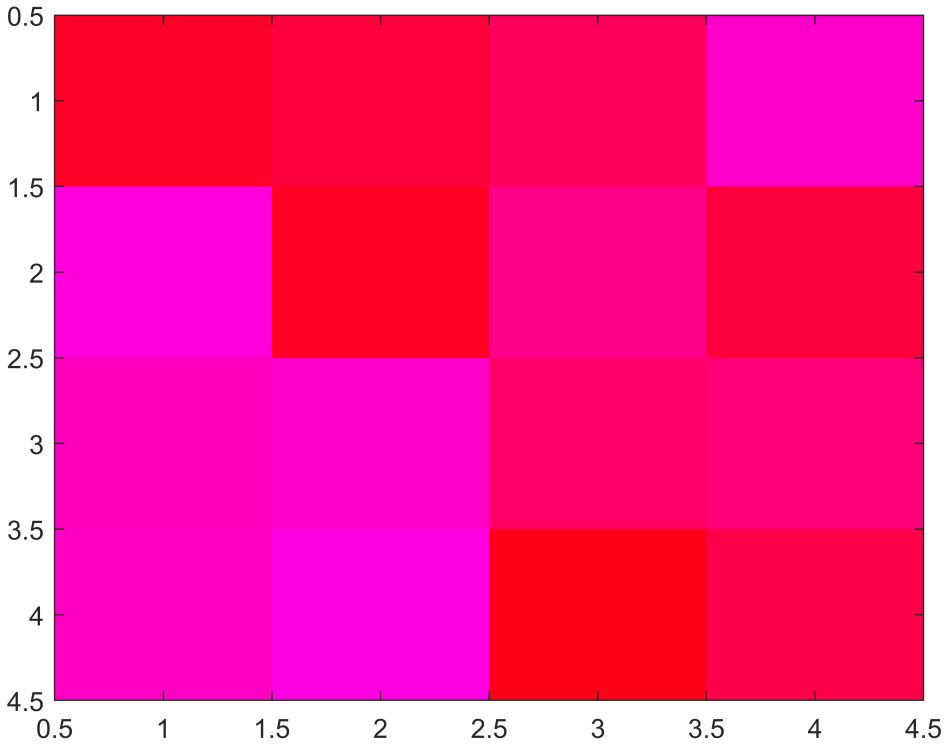
```
ans = 4×4×3 logical array
ans(:,:,1) =

   1   1   1   1
   1   1   1   1
   1   1   1   1
   1   1   1   1
```

```
ans(:,:,2) =

   1   1   1   1
   1   1   1   1
   1   1   1   1
   1   1   1   1


ans(:,:,3) =

   0   0   0   0
   0   0   0   0
   0   0   0   0
   0   0   0   0
```

```
image(A4)
```




```
image(B4)
```



1 Dimentional multiple operation:

```
Z1=randi([1,300],1,1)
```

```
Z1 = 72
```

```
X1=randi([1,300],1,1)
```

```
X1 = 296
```

```
Y1=randi([1,300],1,1)
```

```
Y1 = 254
```

```
V1=randi([1,300],1,1)
```

```
V1 = 239
```

```
N1=randi([1,300],1,1)
```

```
N1 = 271
```

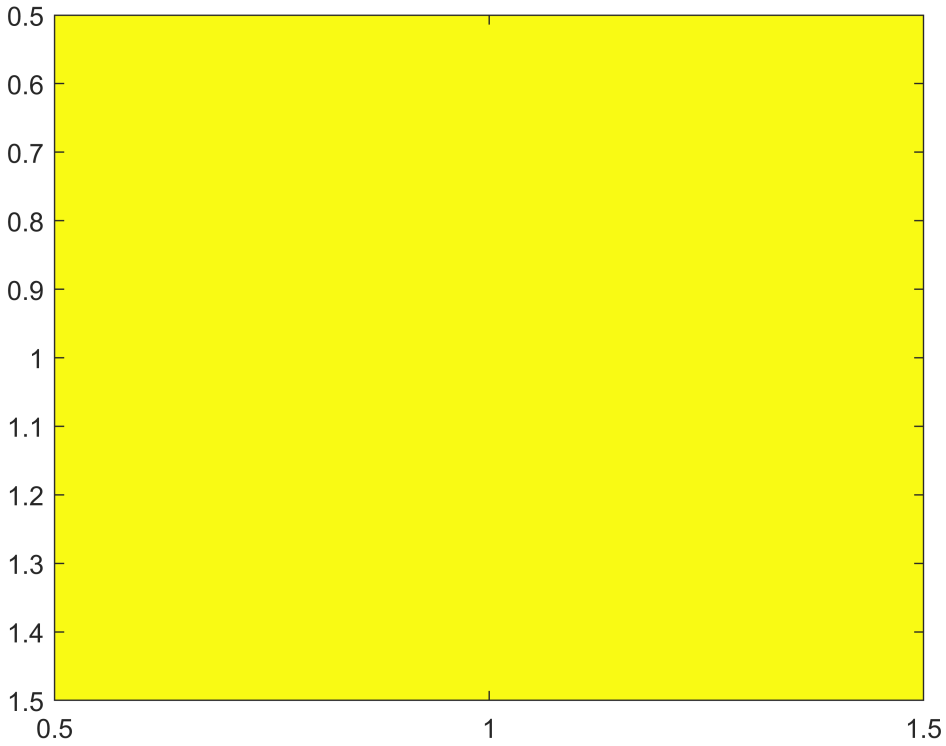
```

ans=Z1+Y1-X1*V1/N1
```

```
ans = 64.9520
```

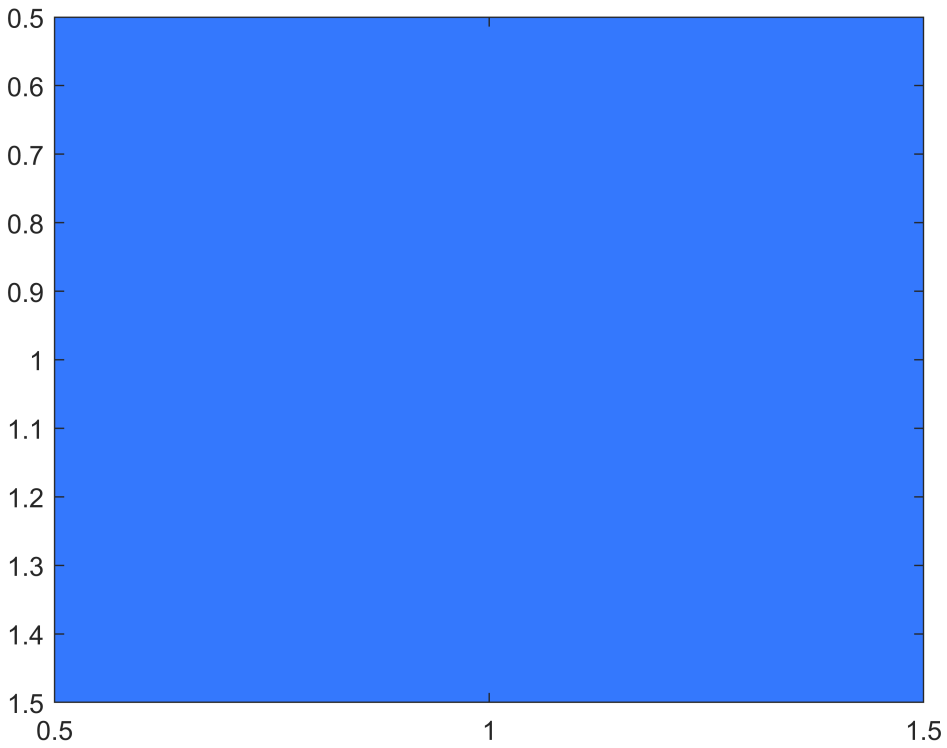
```
ans1=Y1*N1/X1-Z1+V1
```

```
ans1 = 399.5473
```

```
sound(ans1)
image(ans1)
```




```
image(ans)
```



2 Dimentional multiple operation:

```
Z2=randi([1,300],4,4)
```

```
Z2 = 4×4
   235   200    10    66
   251    87   209    30
    97   102    63   186
   223   273   248    32
```

```
X2=randi([1,300],4,4)
```

```
X2 = 4×4
   240     3    94   174
   271   149   181   262
    94   297   235   207
    85   222    34    73
```

```
N2=randi([1,300],4,4)
```

```
N2 = 4×4
   103    72   156   115
   164   147    29   199
    21   242   273   228
   124   114    63    52
```

```
M2=randi([1,300],4,4)
```

```
M2 = 4×4
   156    13    50   126
   299   148   109   273
   213   134   265    29
    25   147   224    55
```

```
L2=randi([1,300],4,4)
```

```
L2 = 4×4
   284    22   211    47
    31    59    72   167
   117   126   288   238
    87    88    92   134
```

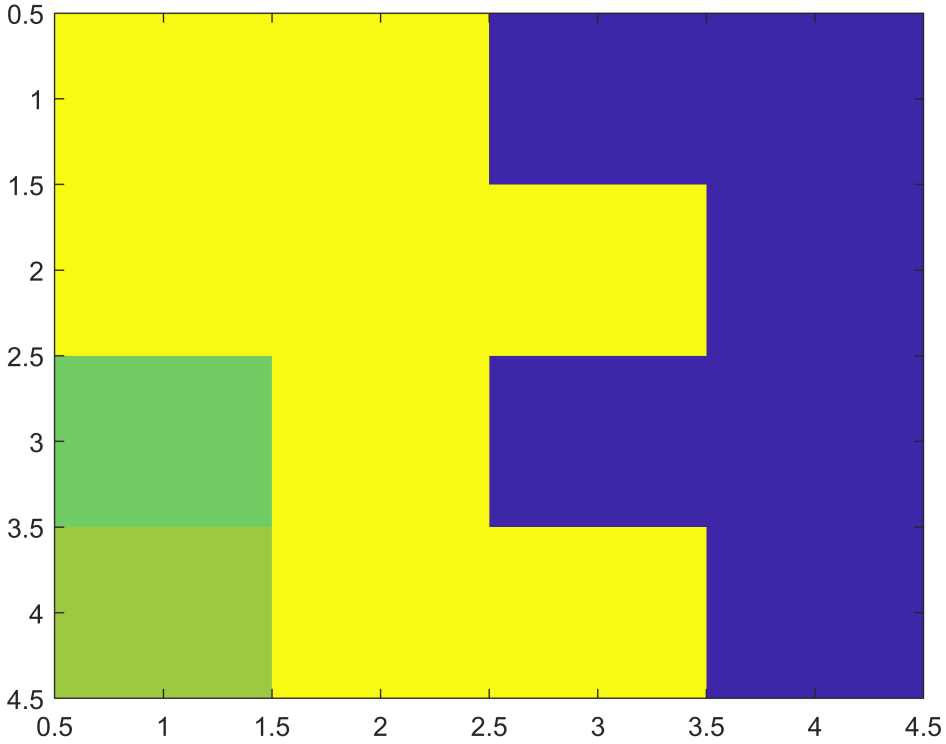
```
ans12=Z2+X2-N2*M2/L2
```

```
ans12 = 4×4
10^3 ×
    0.4316    0.7266   -0.0578   -0.4346
    0.4511    0.4553    0.3529   -0.4323
    0.1679    1.5231   -0.0033   -1.1302
    0.1796    0.4816    0.3681   -0.3701
```

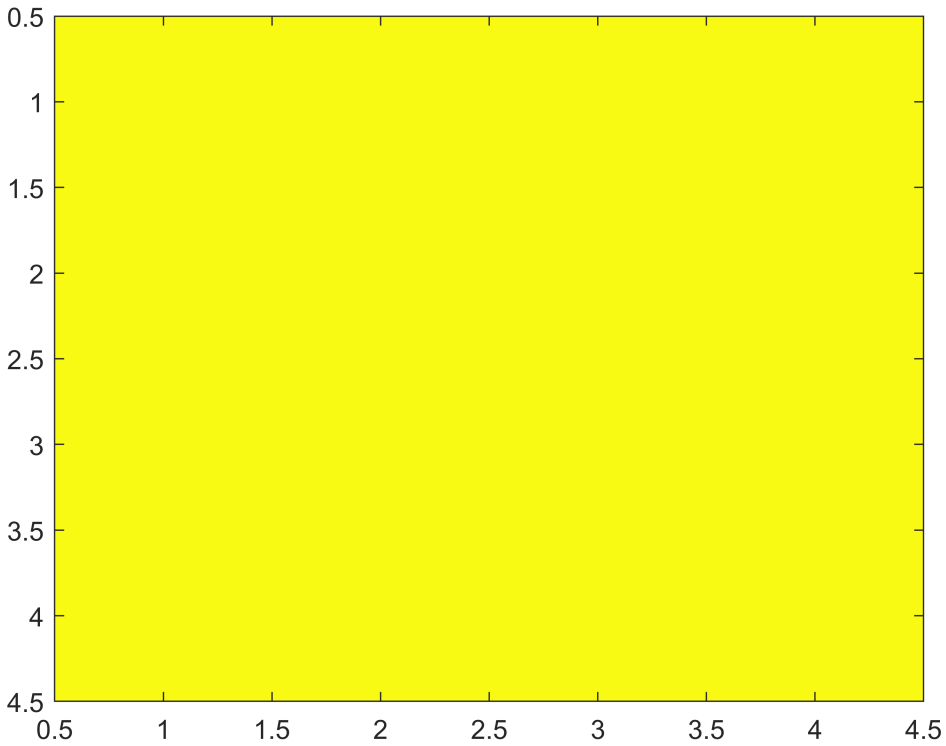
```
ans13=N2-M2/N2+L2*X2
```

```
ans13 = 4×4
10^5 ×
    0.9805    0.7730    0.8202    1.0240
    0.4455    0.6749    0.3622    0.4815
    1.0955    1.5774    1.0985    1.3059
    0.6489    0.7056    0.5034    0.6707
```

```
image(ans12)
```


0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.5
1
1.5
2
2.5
3
3.5
4
4.5

```
image(ans13)
```


0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.5
1
1.5
2
2.5
3
3.5
4
4.5

```
sound(rand(1,20000))
```

3 Dimentional multiple operation:

```
A4(:,:,1)=randi([1,7832],4,4)
```

```
A4 =
A4(:,:,1) =

        2135        4177         945        1075
        7544        6136        6834         145
        2502        3230        5102        2865
        3548        7126        3380         136


A4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


A4(:,:,3) =

   139    88    38   142
    64    77    98   151
   191   154    90    56
     7   160   130   136
```

```
A4(:,:,3)=randi([1,537],4,4)
```

```
A4 =
A4(:,:,1) =

        2135        4177         945        1075
        7544        6136        6834         145
        2502        3230        5102        2865
        3548        7126        3380         136


A4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


A4(:,:,3) =

   254   106    64   300
    71   397   346    78
   454    30    88   198
   515   277    34   109
```

```
B4(:,:,1)=randi([1,892],4,4)
```

```
B4 =
```

```
B4(:,:,1) =

     1   327   871   369
   723   326   192   756
   806   257   595   449
   394   745   394   205


B4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


B4(:,:,3) =

    45   245    59   106
    78    74    76   250
   253   279   185   176
    77   105   142   165
```

```
B4(:,:,3)=randi([1,7832],4,4)
```

```
B4 =
B4(:,:,1) =

     1   327   871   369
   723   326   192   756
   806   257   595   449
   394   745   394   205


B4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


B4(:,:,3) =

        5577        1153        5724        6680
        3385         156        2443        5276
        3258        3321        1215        2111
        7294        7416        7747        7069
```

```
C4(:,:,1)=randi([4,7821],4,4)
```

```
C4 = 4×4
        2081        7317        7716        6487
        6677        6442        4923        7270
        3280        7293        3358        7466
         673        4984        2169        1308
```

```
C4(:,:,3)=randi([4,7821],4,4)
```

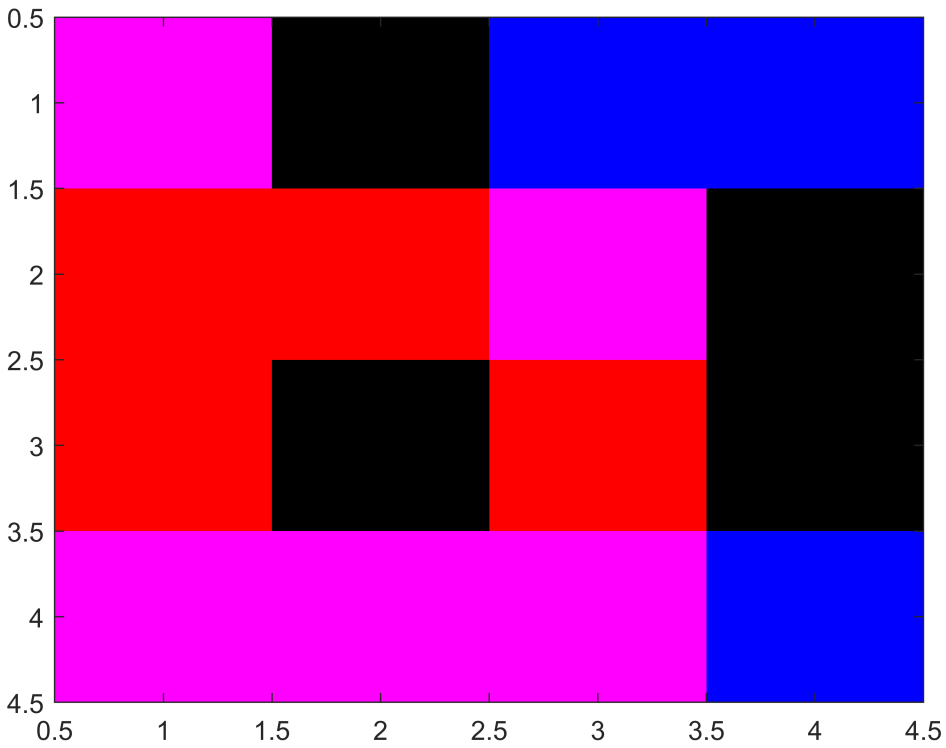
```
C4 =
C4(:,:,1) =

        2081        7317        7716        6487
```

```
        6677        6442        4923        7270
        3280        7293        3358        7466
         673        4984        2169        1308


C4(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


C4(:,:,3) =

        1414        5059        4375        1119
        7413        7745        2449        6000
        4945        6360        3474        4765
        4276        7144        2083        1706
```

```
ansA=A4+B4-C4
```

```
ansA =
ansA(:,:,1) =

          55       -2813       -5900       -5043
        1590          20        2103       -6369
          28       -3806        2339       -4152
        3269        2887        1605        -967


ansA(:,:,2) =

     0     0     0     0
     0     0     0     0
     0     0     0     0
     0     0     0     0


ansA(:,:,3) =

        4417       -3800        1413        5861
       -3957       -7192         340        -646
       -1233       -3009       -2171       -2456
        3533         549        5698        5472
```

```
image(ansA)
```


0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.5
1
1.5
2
2.5
3
3.5
4
4.5