

```
>> sub_matrix
0.8147    0.0975    0.1576    0.1419    0.6557
0.9058    0.2785    0.9706    0.4218    0.0357
0.1270    0.5469    0.9572    0.9157    0.8491
0.9134    0.9575    0.4854    0.7922    0.9340
0.6324    0.9649    0.8003    0.9595    0.6787
```

```
>> identity      Extracting Sub-matrix
      0    -1.0000    0.1576    0.1419    0.6557
    0.5000    0.5000    0.9706    0.4218    0.0357
                        0.9572    0.9157    0.8491
```

```
>> supermarket
    11.2000
```

```
>> random_extract
75    82    48    49    Inf    34    28    12    60    82
74    69    44    Inf    54    19    75    56    26    53
39    31    64    34    13    25    75    46    65    Inf
65    Inf    70    58    14    61    38    0    68    0
17    0    75    22    25    47    56    33    74    44
70    43    27    75    84    35    0    16    45    10
0    38    67    25    25    83    0    79    0    Inf
27    76    65    50    81    58    53    31    22    0
0    79    16    69    24    54    77    52    Inf    77
0    18    11    89    Inf    Inf    Inf    16    15    81

39    31    43    38    48    44    49    34    50    34    47    35    38    46    33    31    45    44
```

```
>> sineseries
sin(5) for n=4 is -67.375992
```

```
>> sortrow
DEF JJJ
KKK ABC
```

```
>> meancal
```

```
>> stringoperation
Enter string 1:John
Enter string 2:Smith
John Smith
*****
htimS nhoJ
```

```
Enter a number (end in 0) :3
Enter a number (end in 0) :2
Enter a number (end in 0) :1
Enter a number (end in 0) :0

3 numbers entered. Sum = 6. Mean = 2.000000.
```

```
>> ppm_read
The Image=
(:, :, 1) =

    255     0     0
     0    255    255

(:, :, 2) =

     0    255     0
    255     0    255

(:, :, 3) =

     0     0    255
    255    255     0
```

```
>> exponent(4)

ans =

    1.0000    1.0000    1.0000    1.0000
    1.0000    2.7183    2.7183    2.7183
    1.0000    2.7183    2.7183    2.7183
    1.0000    2.7183    2.7183    2.7183

>> pi_4(4)

ans =

    0.7071    0.0000   -0.7071   -1.0000

>> matret(3)

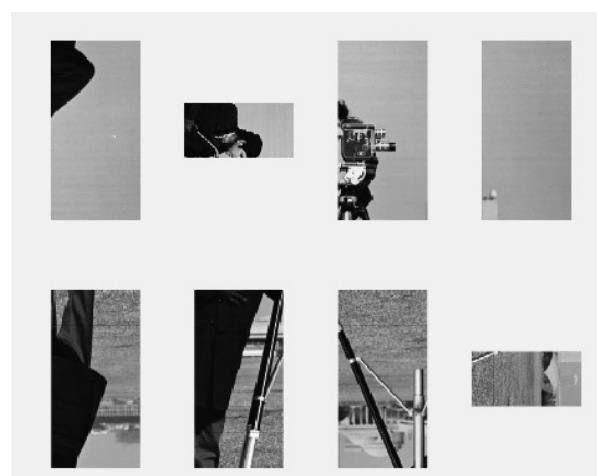
ans =

     1     1     1
     2     2     2
     3     3     3

>> sin_A(3)

ans =

   -0.4794   -0.6184   -0.6816
   -0.6184   -0.6816   -0.7174
   -0.6816   -0.7174   -0.7402
```





```
>> padding
167    165    164
168    169    166
167    165    165
```

Original Image



Salt & Pepper Noise



Mean Filter



Median Filter



Original Image



Gaussian Noise



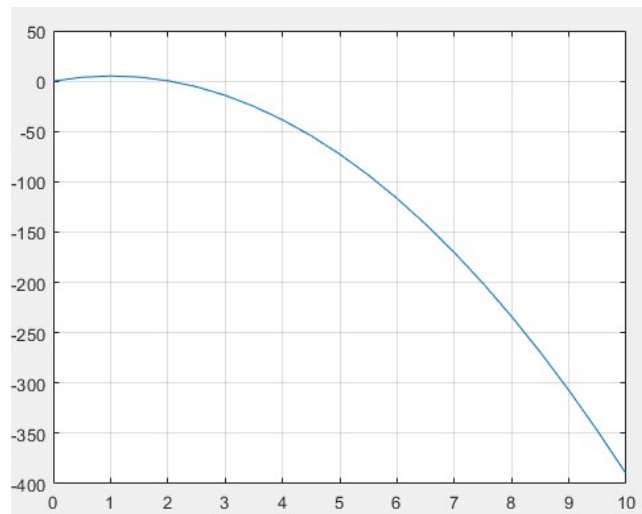
Mean Filter



Median Filter



```
>> q1
enter n:100
Sum = 1.000000
>> q2
ans = 3.141593
>> q3
2.000000
..
```

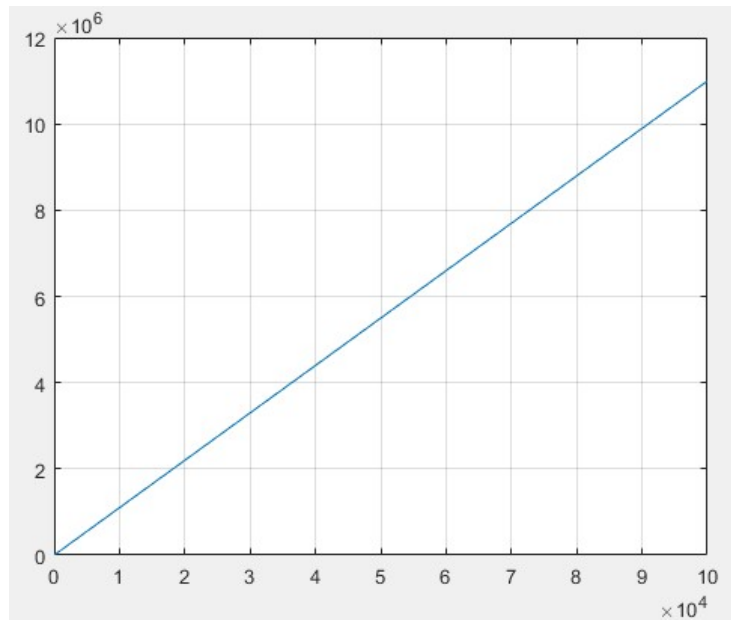


```
>> q1
Enter value for a :10
Enter value for b :9
Enter value for c :6
Enter value for d :3
The solution is
-0.6717 + 0.0000i
-0.1142 + 0.6585i
-0.1142 - 0.6585i
```

```
>> q2
Enter value of a1 = 5
Enter value of b1 = 8
Enter value of c1 = 3
Enter value of d1 = 2
Enter value of a2 = 6
Enter value of b2 = 5
Enter value of c2 = 4
Enter value of d2 = 2
Enter value of a3 = 6
Enter value of b3 = 3
Enter value of c3 = 3
Enter value of d3 = 3
1.0000
0.0000
-1.0000
```

```
>> interest
1.0e+07 *

0.0000    0.0011
0.0001    0.0110
0.0010    0.1100
0.0100    1.0995
```



```
>> quadratic
Enter a:2
Enter b:3
Enter c:4
imaginary solution
-0.7500 + 1.1990i
-0.7500 - 1.1990i
```

```
>> random
even number 4
>> sumsq
Sum is 0.6932
>> sumsq2
Sum is 0.7849
.. |
```

---

```
>> seconds
0:1:0
```

```
>> q1
Negative: 3 Positive: 4 Zero: 2
>> q2
  1      2      0

>> q3
      200      405
      500     1005
      700     1015
     1000     2515
     1500     5040
```

```
>> q1
  0      0      0      0      0
  0      0      0      0      0
  1      1      1      1      1
  1      1      1      1      1

>> q2
  0      0      1      1      0      0
  0      0      1      1      0      0
  1      1      1      1      1      1
  1      1      1      1      1      1
  0      0      1      1      0      0
  0      0      1      1      0      0

>> q3
  0      0      0      1      1      1
  0      0      0      1      1      1

  1      1      0      0      0      0
  1      0      1      0      0      0
  1      0      0      1      0      0
  1      0      0      0      1      0

  1      1
  0      0
  0      0
  1      1
```

```
>> q1
  9.2215      7.9378      6.9952      6.2876      5.7379

>> q2
  3.151493401070991      3.141692643590535      3.141593653588781

>> q3
  1.0e-04 *

  0.980755343681808      0.980755343681808      0.980755343681808
```