```
disp('EJERCICIO I')
EJERCICIO I
sGauss([4 8 4 0;1 5 4 -3;1 4 7 2;1 3 0 -2],[8 -4 10 -4])

A =

     4     8     4     0     8
     1     5     4    -3    -4
     1     4     7     2    10
     1     3     0    -2    -4


A =

     4     8     4     0     8
     0     3     3    -3    -6
     0     2     6     2     8
     0     1    -1    -2    -6


A =

     4     8     4     0     8
     0     3     3    -3    -6
     0     0     4     4    12
     0     0    -2    -1    -4


A =

     4     8     4     0     8
     0     3     3    -3    -6
     0     0     4     4    12
     0     0     0     1     2


ans =

     3
    -1
     1
     2

disp('EJERCICIO III')
```

```
EJERCICIO III
minversa([1 1 0 0;2 -1 5 0;0 3 -4 2;0 0 2 6])

A =

     1     1     0     0     1     0     0     0
     2    -1     5     0     0     1     0     0
     0     3    -4     2     0     0     1     0
     0     0     2     6     0     0     0     1


A =

  Columns 1 through 6

    1.0000         0         0         0   10.3333   -4.6667
         0    1.0000         0         0   -9.3333    4.6667
         0   -0.6429    1.0000         0         0         0
         0         0    0.3333    1.0000         0         0

  Columns 7 through 8

   -5.0000    1.6667
    5.0000   -1.6667
   -0.2143    0.0714
         0    0.1667


A =

  Columns 1 through 6

    1.0000         0         0         0   10.3333   -4.6667
         0    1.0000         0         0   -9.3333    4.6667
         0         0    1.0000         0   -6.0000    3.0000
         0         0    0.3333    1.0000         0         0

  Columns 7 through 8

   -5.0000    1.6667
    5.0000   -1.6667
    3.0000   -1.0000
         0    0.1667


A =

  Columns 1 through 6

    1.0000         0         0         0   10.3333   -4.6667
         0    1.0000         0         0   -9.3333    4.6667
         0         0    1.0000         0   -6.0000    3.0000
         0         0         0    1.0000    2.0000   -1.0000

  Columns 7 through 8

   -5.0000    1.6667
    5.0000   -1.6667
```

```
    3.0000   -1.0000
   -1.0000    0.5000


ans =

   10.3333   -4.6667   -5.0000    1.6667
   -9.3333    4.6667    5.0000   -1.6667
   -6.0000    3.0000    3.0000   -1.0000
    2.0000   -1.0000   -1.0000    0.5000

c=ans;
b=[1;1;1;1];
X=c*b

X =

    2.3333
   -1.3333
   -1.0000
    0.5000

disp('EJERCICIO IV')
EJERCICIO IV
b=[5;-9;19;2];
X=c*b

X =

    2.0000
    3.0000
   -2.0000
    1.0000

disp('EJERCICIO IV')
EJERCICIO IV
sistem_lup([2 -3 8 1;4 0 1 -10;16 4 -2 1;0 7 -1 5],[1 1 1 1])
L=
    1.0000         0         0         0
         0    1.0000         0         0
    0.1250   -0.5000    1.0000         0
    0.2500   -0.1429    0.1751    1.0000

U=
   16.0000    4.0000   -2.0000    1.0000
         0    7.0000   -1.0000    5.0000
         0         0    7.7500    3.3750
         0         0         0  -10.1267

P=
     0     0     1     0
     0     0     0     1
     1     0     0     0
     0     1     0     0

solucion del sistema es:
La solución es:
```

```
ans =

    0.0377
    0.2182
    0.2055
   -0.0644

disp('EJERCICIO VII')
EJERCICIO VII
format shortEng
internewton([40 60 80 100 120 140 160],[1 2 5 9 6 3 -2])

ans =

  Columns 1 through 4

  -998.2639e-012   596.3542e-009  -142.5347e-006    17.3385e-003

  Columns 5 through 7

    -1.1266e+000    37.0442e+000  -480.0000e+000

disp('FIGURA I')
FIGURA I
interLagrange([40 60 80 100 120 140 160],[1 2 5 9 6 3 -2])

ans =

  Columns 1 through 4

  -998.2639e-012   596.3542e-009  -142.5347e-006    17.3385e-003

  Columns 5 through 7

    -1.1266e+000    37.0442e+000  -480.0000e+000

disp('FIGURA II')
FIGURA II
diary off
```