

```
>> A = [1 4; 2 5; 3 6];  
>> A = [1 4; 2 5; 3 6]
```

```
A =
```

```
1     4  
2     5  
3     6
```

```
>> Grafica_LUvsGaussSeidel  
>> Grafica_LUvsGaussSeidel
```

```
Error using plot  
Invalid data argument.
```

```
Error in Grafica_LUvsGaussSeidel (line 10)  
plot(x,y1,':','r',x,y2,'--','b');
```

```
>> Grafica_LUvsGaussSeidel  
>> Grafica_LUvsGaussSeidel
```

```
Error using plot  
Invalid data argument.
```

```
Error in Grafica_LUvsGaussSeidel (line 10)  
plot(x,y1,'r-.','LineWidth',2,x,y2,'b--','LineWidth',2);
```

```
>> Grafica_LUvsGaussSeidel  
Error using plot
```

```
Invalid data argument.
```

```
Error in Grafica_LUvsGaussSeidel (line 10)  
plot(x,y1,'r-.','LineWidth',2,x,y2,'b--');
```

```
>> Grafica_LUvsGaussSeidel  
Error using plot
```

```
Invalid data argument.
```

```
Error in Grafica_LUvsGaussSeidel (line 10)  
plot(x,y1,'r-.','LineWidth',2,x,y2,'b--','LineWidth',2);
```

```
>> Grafica_LUvsGaussSeidel  
At least one index is required.
```

```
Error in Grafica_LUvsGaussSeidel (line 11)  
p().LineWidth = 2;
```

```
>> Grafica_LUvsGaussSeidel  
>> Grafica_LUvsGaussSeidel  
>> Grafica_LUvsGaussSeidel
```

```
>> Grafica_LUvsGaussSeidel
>> Grafica_LUvsGaussSeidel
>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdt] = implicit_vs_explicit✓
(3)
    100

     1

Index in position 2 exceeds array bounds (must not exceed 11).

Error in ProliferacionInvasion2D_MetodoExplicito (line 71)
    c(i,j) = h(x(i,j),y(i,j));

Error in implicit_vs_explicit (line 18)
    [tiempoe] = ProliferacionInvasion2D_MetodoExplicito(m,m);

>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdt] = implicit_vs_explicit✓
(3)
    100

     1

     2

     3

     4

     5

Unrecognized function or variable 'tiemp'.

Error in implicit_vs_explicit (line 27)
    sdt(i) = std(tiemp);

>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdt] = implicit_vs_explicit✓
(3)
    100

     1

     2

     3

     4

     5
```

```
Unrecognized function or variable 'tiemp_Prom_explicit'.
```

```
Error in implicit_vs_explicit (line 28)  
    sdte(i) = std(tiemp_Prom_explicit);
```

```
>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdt] = implicit_vs_explicit✓  
(3)
```

```
100
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
400
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
900
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
tx =
```

```
100
```

```
400
900
```

```
tiempo_Prom_explicit =
```

```
0
0.0125
0.0281
```

```
tiempo_Prom_implicit =
```

```
7.3094
8.0719
9.6781
```

```
sdt =
```

```
0
0.0131
0.0131
```

```
>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdte,sdti] =✓
implicit_vs_explicit(3)
100
```

```
1
```

Unrecognized function or variable 'num_iter'.

Error in ProliferacionInvasion2D_MetodoImplicito (line 205)
iteraTotal(t_aux) = num_iter;

Error in implicit_vs_explicit (line 21)
[tiempo_i,iter,error] = ProliferacionInvasion2D_MetodoImplicito(m,✓
m);

```
>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdte,sdti] =✓
implicit_vs_explicit(3)
100
```

```
1
```

```
2
```

```
3
```

4

5

400

1

2

3

4

5

900

1

2

3

4

5

tx =

100

400

900

tiempo_Prom_explicit =

0.0406

0.1281

0.2687

tiempo_Prom_implicit =

0.0187

0.5719

4.4500

sdte =

0.0237

0.0356

0.0728

sdti =

0.0171

0.0570

0.1262

```
>> [tx,tiempo_Prom_explicit,tiempo_Prom_implicit,sdte,sdti] =  
implicit_vs_explicit(6)
```

100

1

2

3

4

5

400

1

2

3

4

5

900

1

2

3

4

5

1600

1

2

3

4

5

2500

1

2

3

4

5

3600

1

2

3

4

5

tx =

100

400

900

```
1600
2500
3600
```

```
tiempo_Prom_explicit =
```

```
0.0406
0.1125
0.2875
0.4313
0.7125
1.0594
```

```
tiempo_Prom_implicit =
```

```
0.0125
0.5031
4.2313
15.9375
49.9844
153.9906
```

```
sdte =
```

```
0.0237
0.0257
0.0888
0.0601
0.0513
0.0474
```

```
sdti =
```

```
0.0171
0.0447
0.0728
0.1563
1.1843
8.3246
```

```
>> [tiempo] = ProliferacionInvasion2D_MetodoExplicito(130,130)
```

```
tiempo =
```


4.4688

```
>> [tiempo_sum,iter,error] = ProliferacionInvasion2D_MetodoImplicito✓  
(130,130)
```

Out of memory.

Error in ProliferacionInvasion2D_MetodoImplicito (line 196)

```
    [L,U,P] = lu(A_izq);           % Factorizamos la matriz en una✓  
triangular inferior y una superior
```

Related documentation

```
>> clear
```

```
>> [tiempo_sum,iter,error] = ProliferacionInvasion2D_MetodoImplicito✓  
(120,120)
```

```
197      vM = L\(P*vector_b);      % Resolvemos la matriz✓  
inferior
```

```
tiempo_sum =
```

1.0344e+04

```
iter =
```

0

```
error =
```

0

```
>>
```