```
>> [phi_aprox,phi_exacta,x,y,tiempo] = Poisson2D(10,10,@phi,@f);
'Poisson2D' is not found in the current folder or on the MATLAB path, but exists in:
    C:\Users\Dell\Documents\Curso_Computo_Cientifico\Poisson\examples\2D_Poisson

Change the MATLAB current folder or add its folder to the MATLAB path.

>> [phi_aprox,phi_exacta,x,y,tiempo] = Poisson2D(10,10,@phi,@f);
Not enough input arguments.

Error in GaussSeidel (line 22)
while (k<=maxit) && (err > tol)

Error in Poisson2D (line 97)
u = GaussSeidel(A,rhs,x0,m-2,0.0006);

>> [phi_aprox,phi_exacta,x,y,tiempo] = Poisson2D(10,10,@phi,@f);
  1   4.029e+00
  2   1.160e+00
  3   3.534e-01
  4   1.095e-01
  5   3.409e-02
  6   1.057e-02
  7   3.233e-03
  8   9.617e-04
  9   2.611e-04
Error using reshape
Number of elements must not change. Use [] as one of the size inputs to automatically↙
calculate the appropriate size for that dimension.

Error in Poisson2D (line 101)
utemp = reshape(u,n-2,m-2);        % Cambiamos de vector a matriz

>> [phi_aprox,phi_exacta,x,y,tiempo] = Poisson2D(10,10,@phi,@f);
   32.1634

Matrix A is not diagonally-dominant
  1   3.465e+00
  2   1.268e+00
  3   5.567e-01
  4   2.543e-01
  5   1.178e-01
  6   5.491e-02
  7   2.567e-02
  8   1.202e-02
  9   5.635e-03
 10   2.644e-03
    1.4545
    1.2582
    1.2974
    1.4105
    1.5636
    1.7791
    2.1831
    3.2550
```

```
Error using reshape
Number of elements must not change. Use [] as one of the size inputs to automatically↙
calculate the appropriate size for that dimension.

Error in Poisson2D (line 119)
utemp = reshape(u,n-2,m-2);        % Cambiamos de vector a matriz

>> [phi_aprox,phi_exacta,x,y,tiempo] = Poisson2D(10,10,@phi,@f);
   32.1634

Matrix A is not diagonally-dominant
    2.7926
    3.0968
    3.4122
    3.7463
    4.1135
    4.5382
    5.0623
    5.7618
    3.5132
    3.8999
    4.2831
    4.6759
    5.1029
    5.6050
    6.2494
    7.1469
    4.4335
    4.9469
    5.4446
    5.9464
    6.4855
    7.1142
    7.9139
    9.0098
    5.5935
    6.2785
    6.9376
    7.5986
    8.3019
    9.1062
   10.0986
   11.4087
    7.0377
    7.9364
    8.8036
    9.6770
   10.6023
   11.6404
   12.8780
   14.4416
    8.8142
    9.9612
   11.0825
   12.2269
```

```
   13.4435
   14.7914
   16.3508
   18.2378
   10.9709
   12.3867
   13.8068
   15.2894
   16.8839
   18.6431
   20.6351
   22.9572
   13.5428
   15.2272
   16.9918
   18.8938
   20.9760
   23.2815
   25.8623
   28.7890

>> [phi_aprox,phi_exacta,x,y,tiempo] = Poisson2D(10,10,@phi,@f);
   32.1634

Matrix A is not diagonally-dominant
  1   3.241e+01
  2   1.673e+01
  3   1.131e+01
  4   8.514e+00
  5   6.814e+00
  6   5.664e+00
  7   4.825e+00
  8   4.176e+00
  9   3.653e+00
 10   3.220e+00
    2.2523
    2.0775
    2.0073
    2.0886
    2.3881
    2.9752
    3.8918
    5.1491
    2.4579
    1.9113
    1.5476
    1.4613
    1.7800
    2.6220
    4.0364
    5.9979
    2.9141
    2.0936
    1.5355
    1.3834
```

```
    1.8154
    2.9699
    4.8737
    7.4464
    3.7261
    2.7916
    2.1941
    2.1168
    2.7600
    4.2509
    6.5785
    9.6162
    5.0345
    4.2248
    3.8021
    3.9644
    4.9008
    6.7069
    9.3393
   12.6551
    6.9685
    6.5701
    6.5584
    7.1182
    8.4036
   10.4761
   13.2823
   16.6989
    9.5818
    9.8536
   10.4570
   11.5430
   13.2223
   15.5330
   18.4374
   21.8598
   12.8191
   13.9145
   15.2677
   16.9793
   19.1173
   21.7114
   24.7571
   28.2383

>>
```