

```

% USAGE:
% x=cls_mds(d)
%
% Input argument:
% d - a matrix which represents the dissimilarities
% between the points;
%
% Output argument:
% x - a matrix with the coordinates of points
% in the rows.
%
% This procedure uses procedure 'spectral'
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```

```

% BEGIN
[n,m] = size(d);

% step 2
a = (-1/2)*d.^2;

% step 3
h = eye(n,m) - (1/n)*(ones(n,1)*ones(1,n));

% step 4,5,6,7
[l,d] = spectral(h*a*h);

% step 8
l=l^(0.5); x=d*l;
%END

```

```

function [x1,y1,A,r] = procr(x,y)
% Function PROCR computes the rotation and the
% delation needed to transform the set of
% points X as close as possible to the set Y.
%

```

```

% USAGE:
% [x1,y1,A,r,R] = procr(x,y)
%
% Input arguments:
% x - a matrix which represents the set of points X
% the coordinates of the points are rows in
% matrix x;

```