Data: Matriz D n-por-n de distâncias entre as cidades.
d número de dimensões do vetor posições
Result: A matriz X n-por-d cujas linhas são as coordenadas (x_i com $i = 1...d$) das cidades.

```
1  begin
2      //Compute MSQ
3      n ⟵ sizeof(D)
4      MSQ ⟵ zeros(n) //mean of squares of distances for column or row
5      XXT ⟵ zeros(n, n) //position matrix times position transposed
6      X ⟵ zeros(n, d) //position matrix
7      nssq ⟵ 0//n times sum of squares of distances
8      for i=1..n do
9          ssqi ⟵ 0//sum of squares of distances for row i
10         for j=1..n do
11             ssqi+ = D[i, j] ∗ D[i, j]
12         end
13         MSQ[i] = ssqi/n
14         nssq+ = ssqi
15     end
16     msq = nssq/(2n^2)
17     //Compute diagonals
18     for i=1..n do
19         for j=1..n do
20             XXT[i, j] = −0.5 ∗ (D[i, j] ∗ D[i, j] − MSQ[i] − MSQ[j] + 2 ∗ msq)
21             XXT[j, i] = XXT[i, j]
22         end
23     end
24     U, S, V ⟵ svd(XXT)
25     //Compute X
26     for i=1..n do
27         for j=1..n do
28             X[i, j] = U[i, j] ∗ S[j, j]
29         end
30     end
31     return X
32 end
```