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