

I have C and Q and want to solve this problem $\text{Multiply}(C, \text{Transpose}(C)) = Q$

$$Q := \begin{bmatrix} 4.000000000 & 4.000000000 & 0. \\ 4.000000000 & 8.000000000 & 4.000000000 \\ 0. & 4.000000000 & 8.000000000 \end{bmatrix}$$

$$C := \begin{bmatrix} x_{1,1} & x_{1,2} & x_{1,3} \\ x_{2,1} & x_{2,2} & x_{2,3} \\ x_{3,1} & x_{3,2} & x_{3,3} \end{bmatrix}$$

I use fsolve to solve it, but I had error. if it is possible to solve with fsolve or other command please help me.

If there is another way to solve it such matrix dissection or other ways in Linear Algebra Please tell me.