Singular Value Decomposition Practice Problems

Find the singular value decompositions $U\Sigma V^T$ of the following matrices taken from the Section 7.1 and 7.2 problems:

1. $A = \begin{bmatrix} 2 & 1 \\ 4 & 2 \end{bmatrix}$
2. $B = \begin{bmatrix} 0 & 4 \\ 1 & 0 \end{bmatrix}$
3. $C = \begin{bmatrix} 2 & 2 \\ -1 & 1 \end{bmatrix}$
4. $D = \begin{bmatrix} 1 & 1 \\ 1 & 0 \end{bmatrix}$