

Find the eigenvalues of the matrix

$$A = \begin{bmatrix} c_1 & c_2 & \dots & c_n \\ c_1 & c_2 & \dots & c_n \\ \vdots & \vdots & & \vdots \\ \vdots & \vdots & & \vdots \\ c_1 & c_2 & \dots & c_n \end{bmatrix}$$