

Q6

1

$$A = \begin{bmatrix} 2 & 3 & -2 & 1 & 2 \\ -2 & 1 & 0 & 2 & 3 \end{bmatrix}$$

Divide Matrix \overline{A} into Matrix \overline{B} and \overline{N}

Divide Column Vector \overline{C} into $\overline{C_B}$ and $\overline{C_N}$.

$$B = \begin{bmatrix} 2 & 3 \\ -2 & 1 \end{bmatrix} \quad N = \begin{bmatrix} -2 & 1 & 2 \\ 0 & 2 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 4 \\ 2 \end{bmatrix}$$

$$C = \begin{bmatrix} 4 \\ 2 \\ 1 \\ 4 \\ -2 \end{bmatrix}$$

$$C_B = \begin{bmatrix} 4 \\ 2 \end{bmatrix}$$

$$C_N = \begin{bmatrix} 1 \\ 4 \\ -2 \end{bmatrix}$$