



National Forensic Sciences University

Knowledge | Wisdom | Fulfilment

An Institution of National Importance
(Ministry of Home Affairs, Government of India)

Assignment: 4 ➡ Eigenvalues and Eigenvectors

School of Cyber Security and Digital Forensics

Sr. No.	Questions
1	Find the eigenvalues and eigenvectors for $A = \begin{bmatrix} 1 & 0 & -1 \\ 1 & 2 & 1 \\ 2 & 2 & 3 \end{bmatrix}$
2	Find the eigenvalues and eigenvectors for $B = \begin{bmatrix} 11 & -4 & -7 \\ 7 & -2 & -5 \\ 10 & -4 & -6 \end{bmatrix}$
3	Find the eigenvalues and eigenvectors for $C = \begin{bmatrix} 2 & 1 & 0 \\ 0 & 2 & 1 \\ 0 & 0 & 2 \end{bmatrix}$
4	Find the eigenvalues and eigenvectors for $D = \begin{bmatrix} 2 & -2 & 2 \\ 1 & 1 & 1 \\ 1 & 3 & -1 \end{bmatrix}$
5	Find the eigenvalues and eigenvectors for $E = \begin{bmatrix} 6 & -2 & 2 \\ -2 & 3 & -1 \\ 2 & -1 & 3 \end{bmatrix}$
6	Find the eigenvalues and eigenvectors for $F = \begin{bmatrix} 3 & 1 & 1 \\ 1 & 3 & -1 \\ 1 & -1 & 3 \end{bmatrix}$