<u>Lab-03</u>

- 1. Write a MATLAB program to find the largest eigenvalue and the corresponding eigenvector of a matrix.
- 2. Find the largest and smallest eigenvalues and the corresponding eigenvector of the matrix $A = \begin{bmatrix} 5 & 8 & 4 & 5 \\ \vdots & 8 & 4 & 5 \\ \vdots & \vdots & \vdots & \vdots \\ \end{bmatrix}$
- 3. One of the other eigenvalue is approximately found to be -4.2. Improve the accuracy of the eigenvalue and also find the eigenvector corresponding to this eigenvalues.