

Codenativ (Event Description)

Project Description:

1. You need to create a 'Library' based upon the topic:
 - Matrix Addition
 - Matrix Multiplication
 - Cofactor of Matrix
 - Adjoint of Matrix
 - Minor of Matrix
 - Determinant of matrix
 - Characteristics equation of Matrix
 - Inverse of matrix
 - Eigen value and Eigen Vector
 - Rank of matrix
2. Using the library you need to verify the Cayley-Hamilton Theorem for a given matrix.

$$\text{Matrix A} = \begin{vmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{vmatrix}$$

3. Using the library find the inverse of the matrix.

$$\text{Matrix A} = \begin{vmatrix} 1 & 2 & 3 \\ 0 & 1 & 4 \\ 5 & 6 & 0 \end{vmatrix}$$

Note:

- The matrix must be a 3*3
- The resultant matrix must be printed out as output