TOPIC: TWO DIMENSIONAL ARRAYS(NUMERIC)

1. Write a program to accept a matrix of the order $3 \times 3$ of integers. Find its transpose and store it in another 2-D array and display the result.
2. Write a program to accept a matrix of the order $4 \times 4$ of integers. Display its diagonal elements in the matrix form.
3. Write a program to accept a square matrix of the order $M \times M$ of integers. Display its border elements in the matrix form.
4. Write a program to accept a matrix of the order $4 \times 4$ of integers. Display the upper triangular elements and lower triangular elements of the matrix in the matrix form separately.
5. Write a program to accept two matrices of the order $M \times N$ and $P \times Q$ of integers. Check whether they can be added, if possible add them and store it in another matrix and display the result matrix.
6. Write a program to accept two matrices of the order $M \times N$ and $P \times Q$ of integers. Check whether they can be multiplied, if possible multiply them and store it in another matrix and display the result matrix.
7. Write a program to accept a matrix of the order $3 \times 3$ of integers. Interchange the first row elements with the last row elements in the same matrix and display the result.
