Practice Tasks

Instructions:

- Use base plus index addressing mode to access matrices.
- Perform and submit these tasks in lab

Task-1

Write a program that declares and initializes word-type matrices A and B of 3 x 4 and 4 x 4 sizes, respectively. The program multiplies these two matrices and saves the result in the third 4x4 matrix C.

The linear address for A[i][j] can be calculated by (i*number_of_columns+j). For example, A[1][1] => A[5].

Task-2

Write a program that transpose a matrix of 3x4 size.

Example:

$$\begin{pmatrix} 5 & 4 & 3 \\ 4 & 0 & 4 \\ 7 & 10 & 3 \end{pmatrix}^{T} = \begin{pmatrix} 5 & 4 & 7 \\ 4 & 0 & 10 \\ 3 & 4 & 3 \end{pmatrix}$$