

# Laboratory Practical Exam: Matrix Transpose

## Implementation Guide:

Ask for 12 characters of user input

Display it in 3 x 4 row-major order matrix

Perform matrix transpose so that it would become a 4x3 matrix

Display the transposed matrix. Example:

Input:0123456789AB

Matrix:

0,1,2,3,

4,5,6,7,

8,9,A,B,

Transposed Matrix:

0,4,8,

1,5,9,

2,6,A,

3,7,B,

Be sure that the memory order would also change during matrix transform. Example:

Memory Address (example only)	Memory Order Before Matrix Transpose (HEX)	Memory Order After Matrix Transpose (HEX)
07150	30	30
07151	31	34
07152	32	38
07153	33	31
07154	34	35
07155	35	39
07156	36	32
07157	35	36
07158	38	41
07159	39	33
0715A	41	37
0715B	42	42