Matrix Transposition
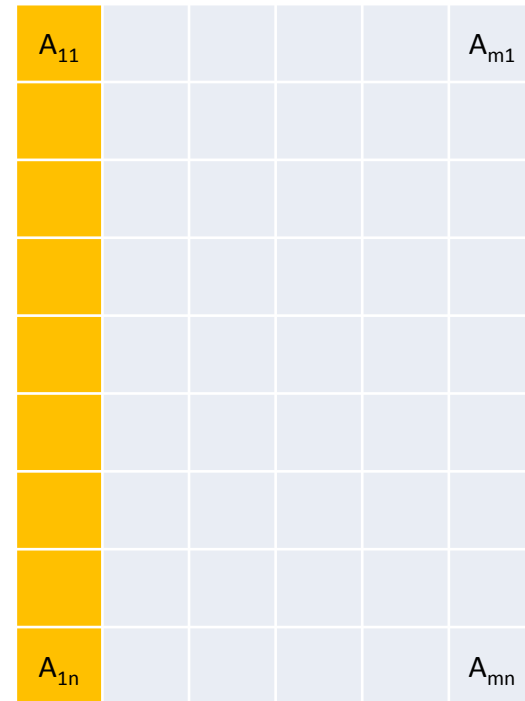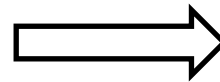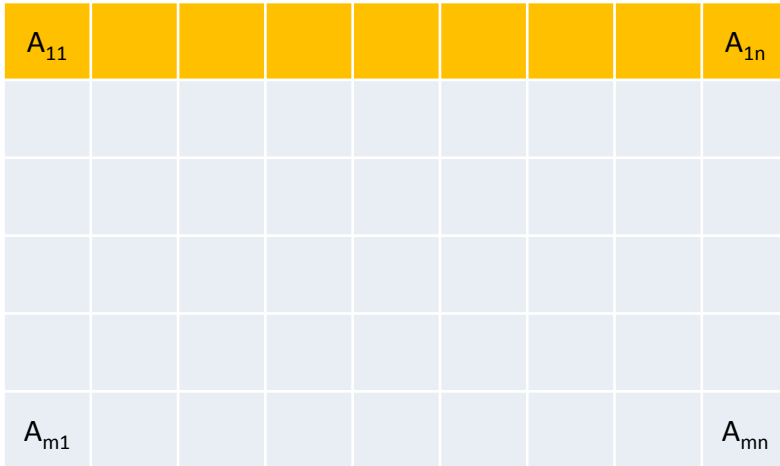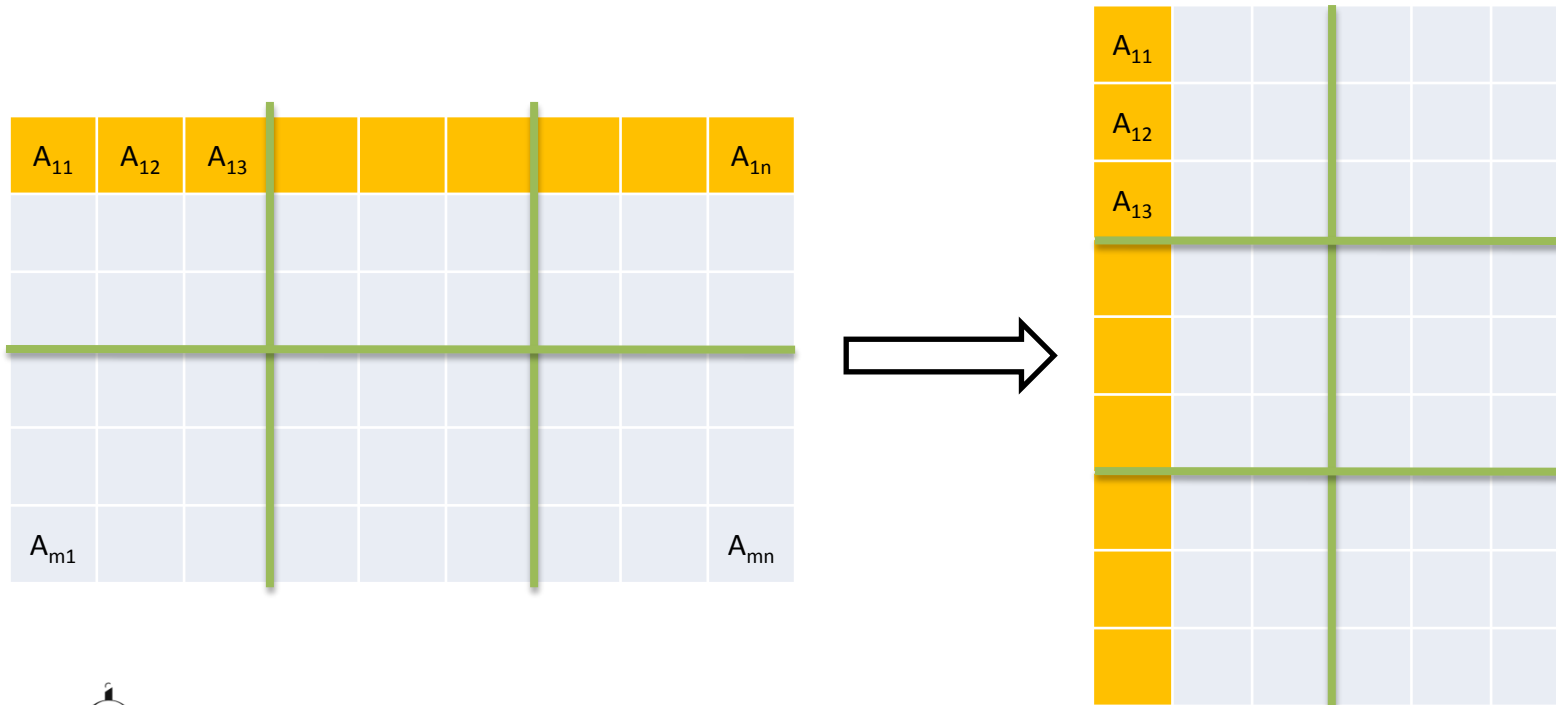

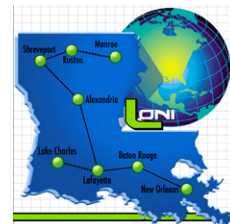For every element (i,j)
A_T(i,j)=A(j,i)

How to do this in parallel?

Matrix Transposition

We can divide it into sub-matrices, assign one to each process, do local transposition, and assemble them.

Parallel Matrix Transposition

1. Create a process grid;
2. Divide the matrix into sub-matrices accordingly and assign one to each process;
3. Let each process perform local transposition;
4. Send the transposed sub-matrix to the root process for assembling