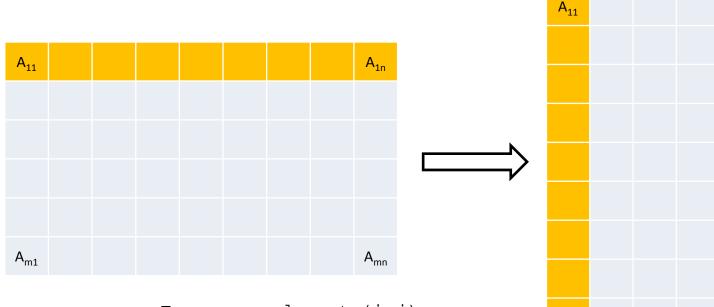




Matrix Transposition



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



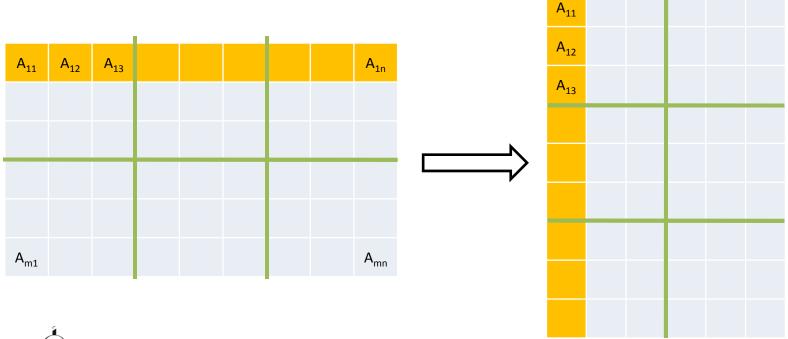
How to do this in parallel?

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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



