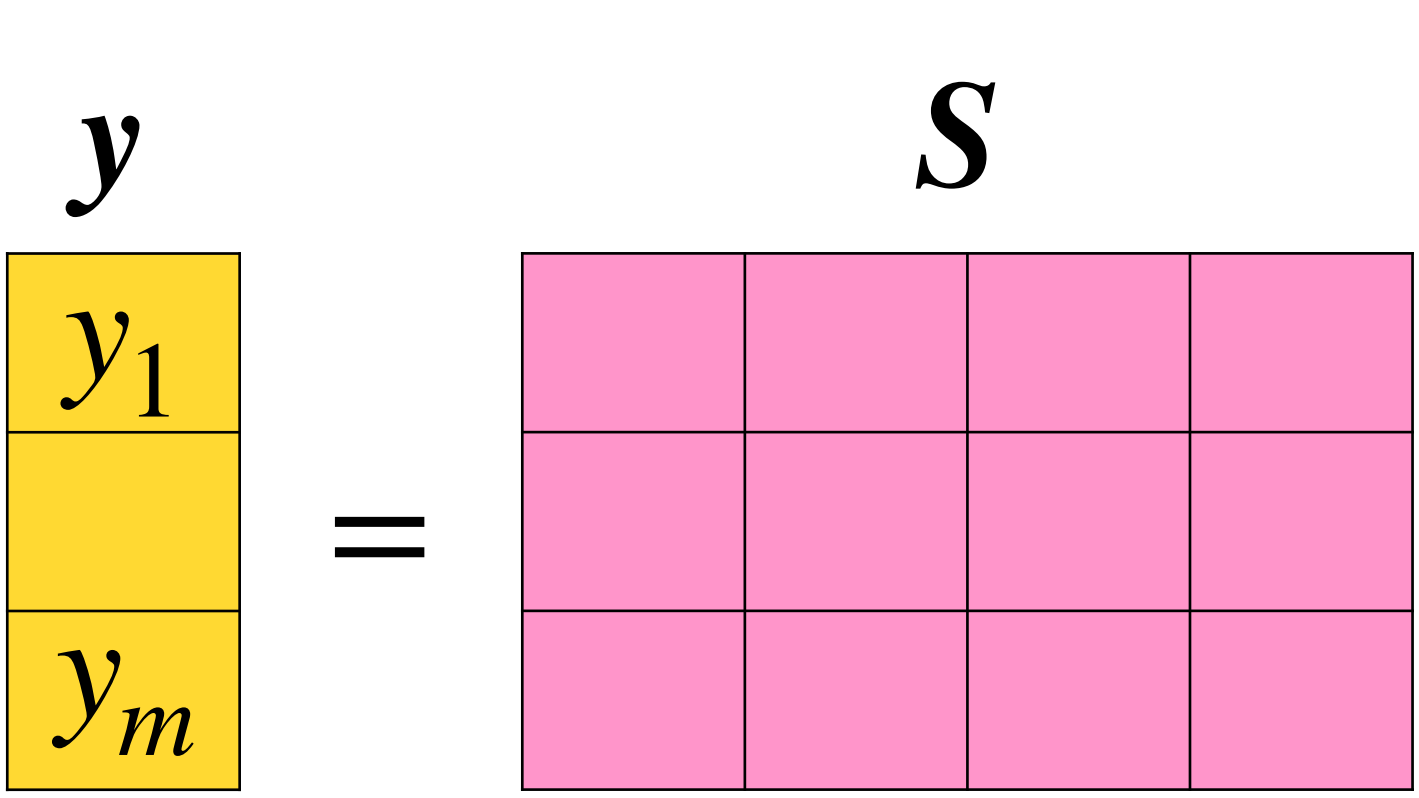
Andoni's Algorithm

- Max stability $\Longrightarrow \max(\mathbf{e}_1^{-1/p}\,|\,x_1\,|\,,\ldots,\mathbf{e}_n^{-1/p}\,|\,x_n\,|\,) \equiv \mathbf{e}^{-1/p}F_p(x)^{1/p}$

30


y
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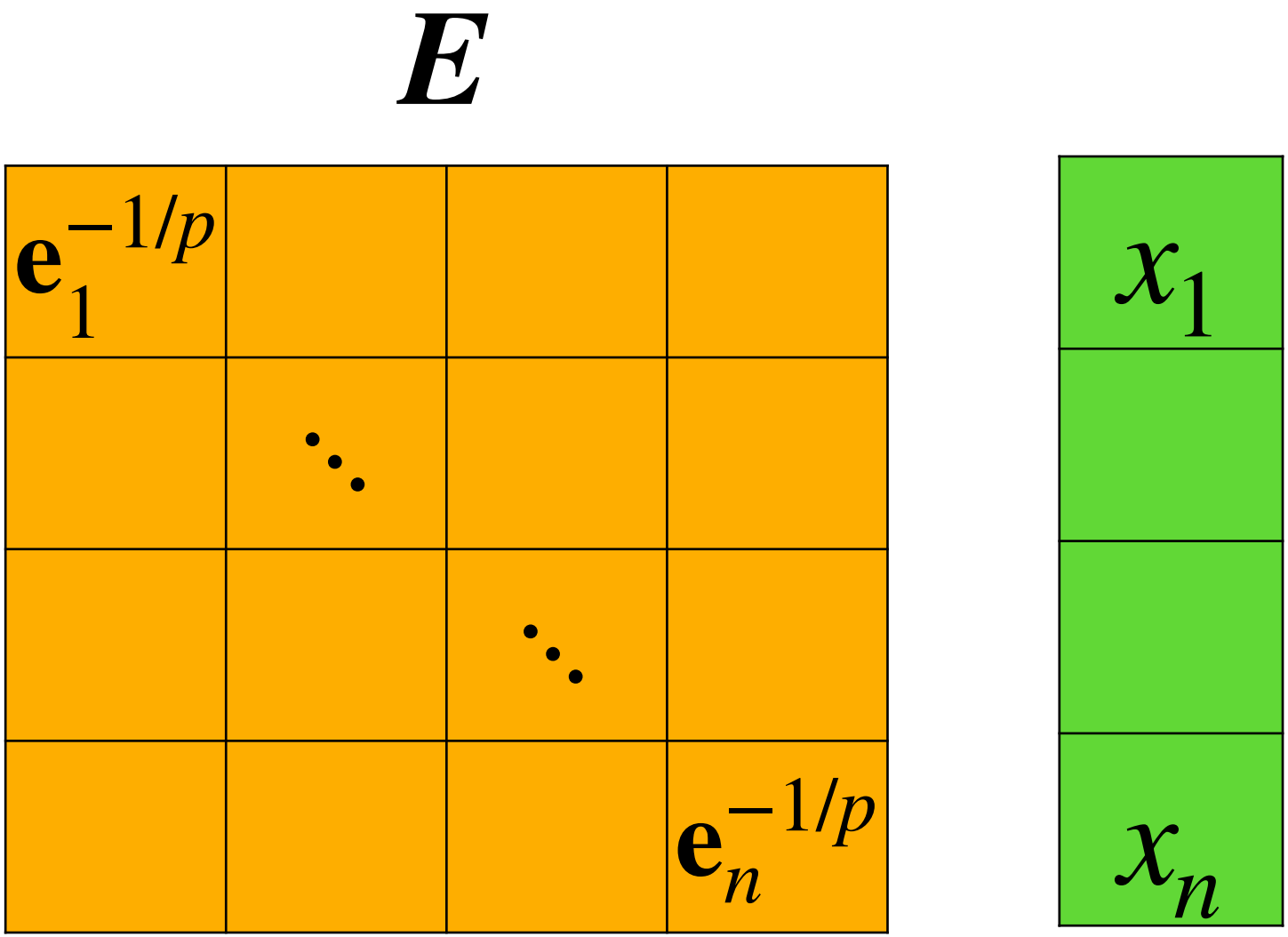
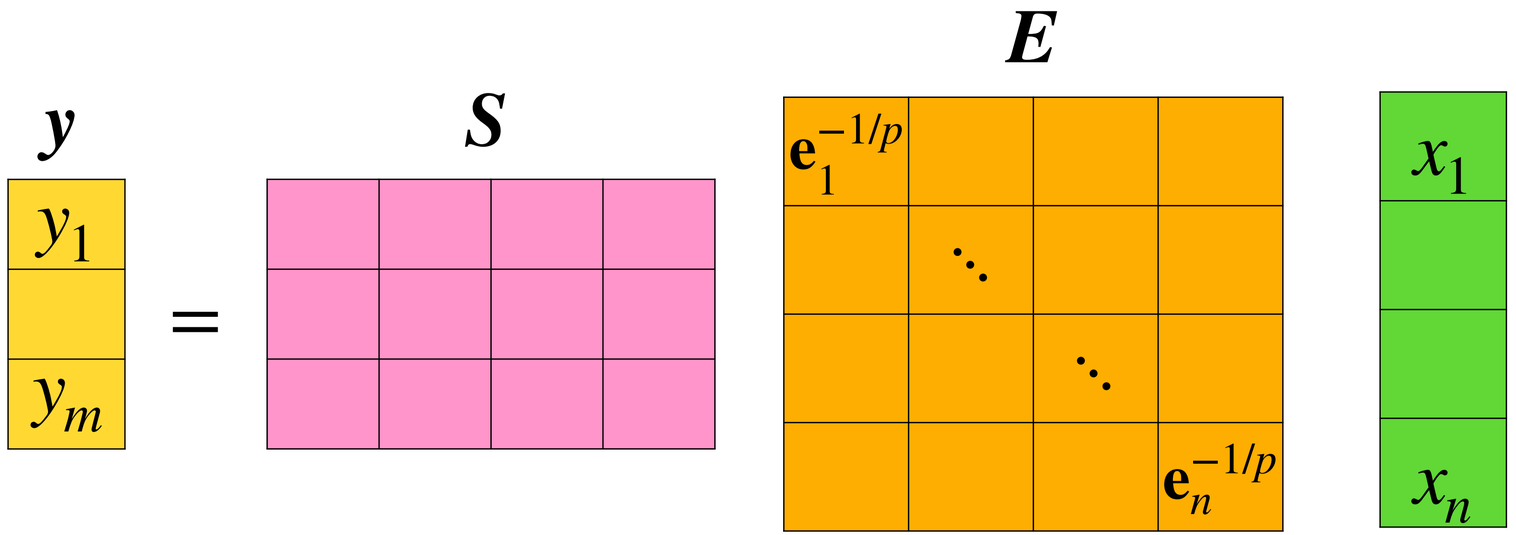


$$\|\boldsymbol{E}x\|_\infty \approx F_p(x)^{1/p}$$

If $m = \Theta(n^{1-2/p} \log n)$, then $\|\boldsymbol{S}\boldsymbol{E}x\|_\infty \approx F_p(x)^{1/p}$

Andoni's Algorithm

- Max stability $\Longrightarrow \max(\mathbf{e}_1^{-1/p}\,|x_1|, \ldots, \mathbf{e}_n^{-1/p}\,|x_n|) \equiv \mathbf{e}^{-1/p} F_p(x)^{1/p}$



$$\|\boldsymbol{E}x\|_\infty \approx F_p(x)^{1/p}$$

If $m = \Theta(n^{1-2/p} \log n)$, then $\|\boldsymbol{SE}x\|_\infty \approx F_p(x)^{1/p}$

Implementing in a Stream