Independent Sampling of Columns

- We want to construct a sketching matrix S such that for all x

- Sx can be used to compute what we want to know about x

- S can be stored efficiently

- S_{*_i} can be generated **on-demand**

- If each S_{*i} is independently sampled from a distribution

- Analysis is easier

- $\Omega(n)$ space to store S

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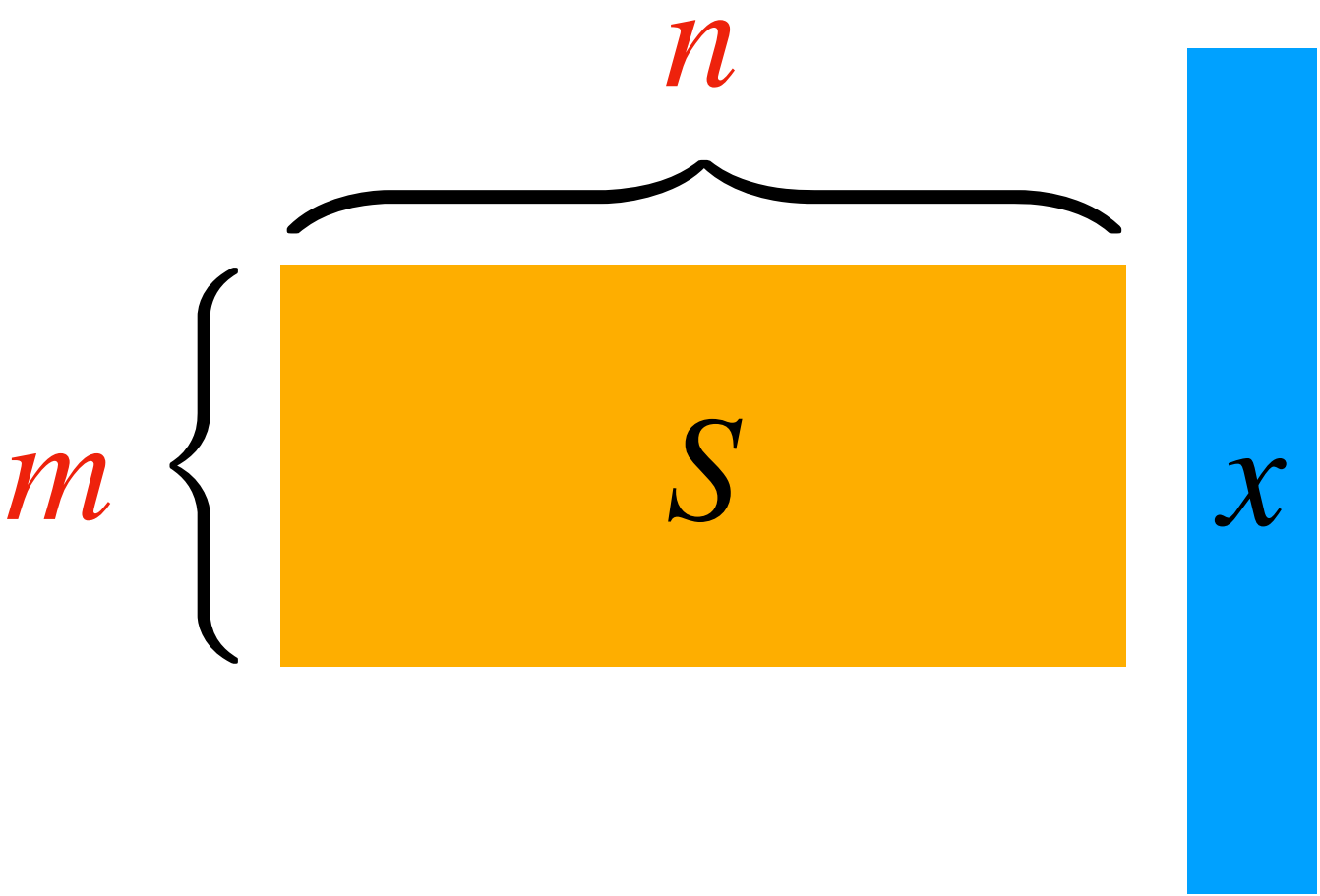
n
m
S
x

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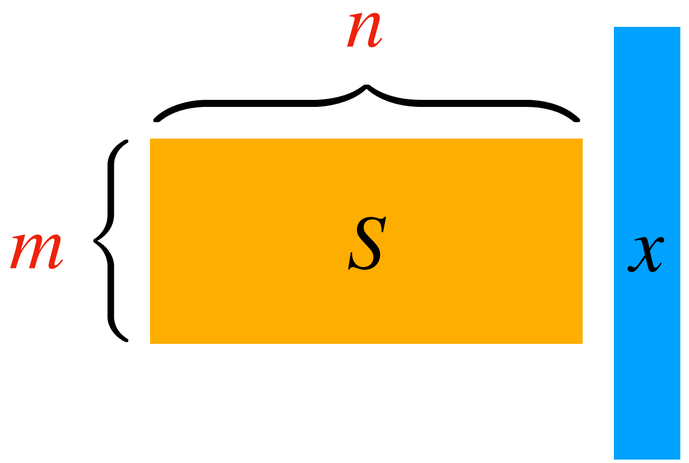

Derandomizing with PRG