



How is Sketching Useful?

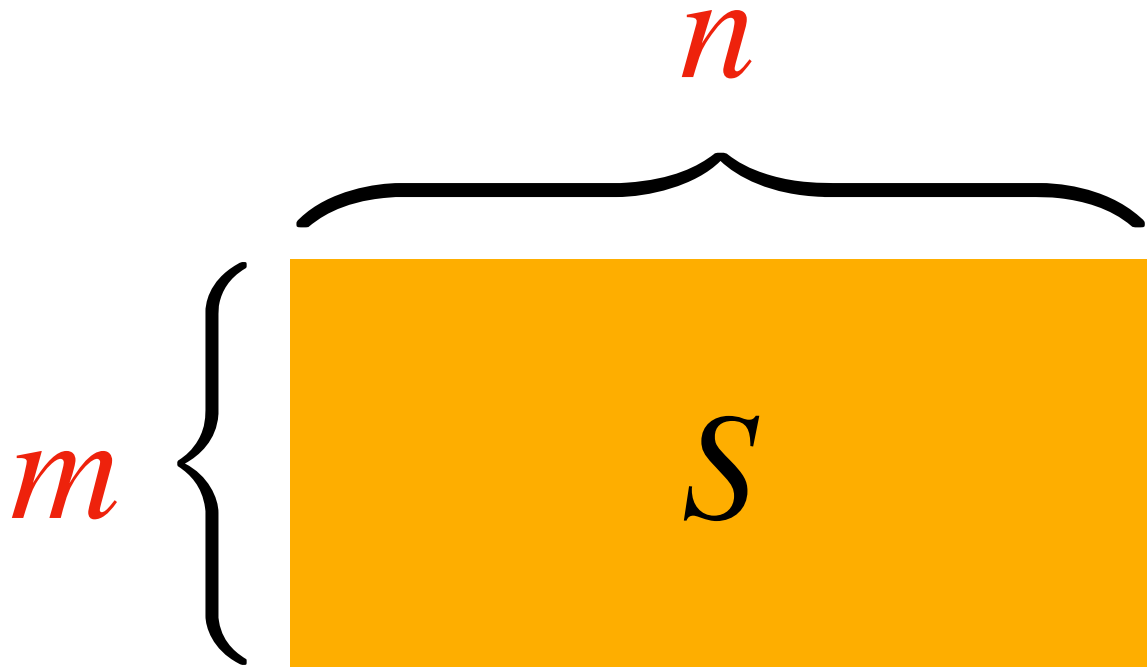
**Turnstile Streaming**

- $S$  can be stored using small space and  $n$  small  $\Rightarrow$  Small space streaming algorithms!

- $S_{*j}$  can be retrieved quickly  $\Rightarrow$  Fast update times

• will discuss how we obtain sparse-optimal algorithms with fast update times

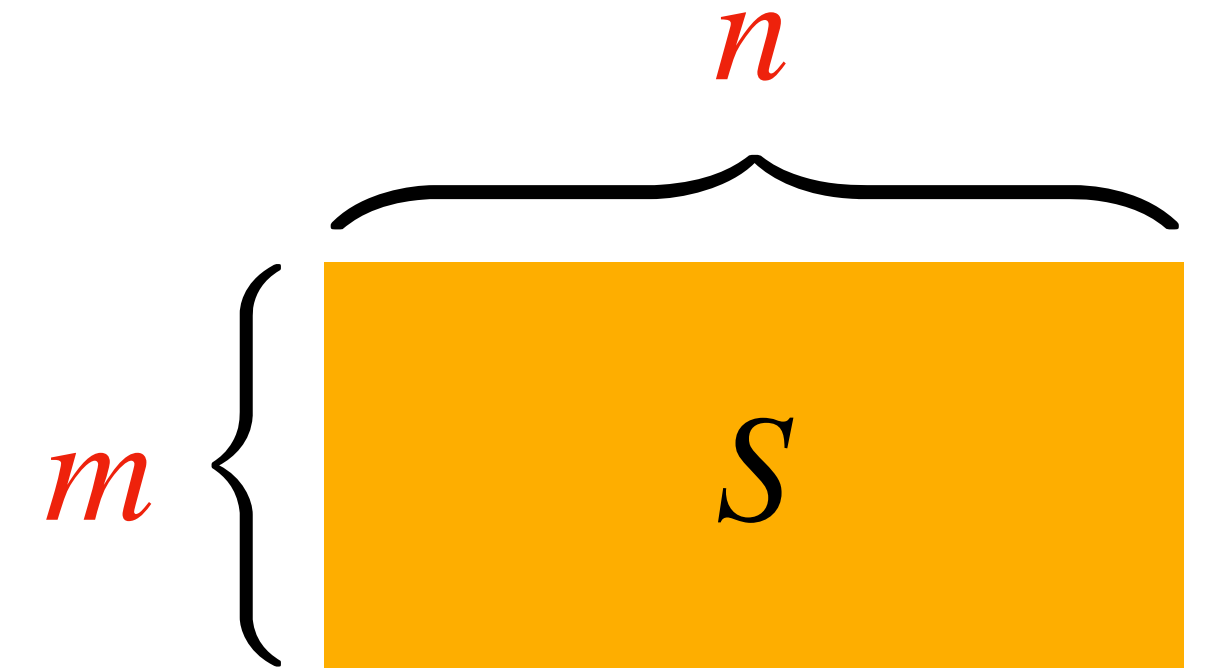






# How is Sketching Useful?

## Turnstile Streaming



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  - I will discuss how we obtain space-optimal algorithms with fast update times

# Our Results