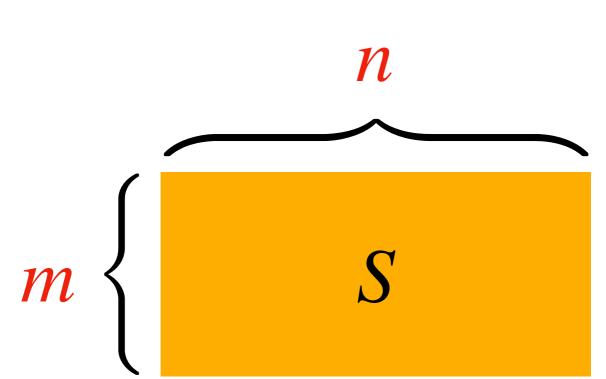
How is Sketching Useful?

Turnstile Streaming

ullet S can be stored using small space and m small \Rightarrow Small space streaming algorithms!

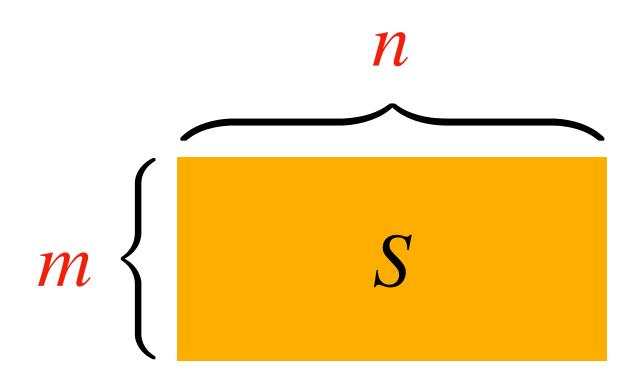
• S_{*_i} can be retrieved quickly \Rightarrow Fast **update** times

We will discuss how to obtain space-optimal algorithms with fast update times



How is Sketching Useful?

Turnstile Streaming



- S can be stored using small space and m small \Rightarrow Small space streaming algorithms!
- S_{*i} can be retrieved quickly \Rightarrow Fast **update** times
 - We will discuss how to obtain space-optimal algorithms with fast update times

Complexity Measures