

How is Sketching Useful?

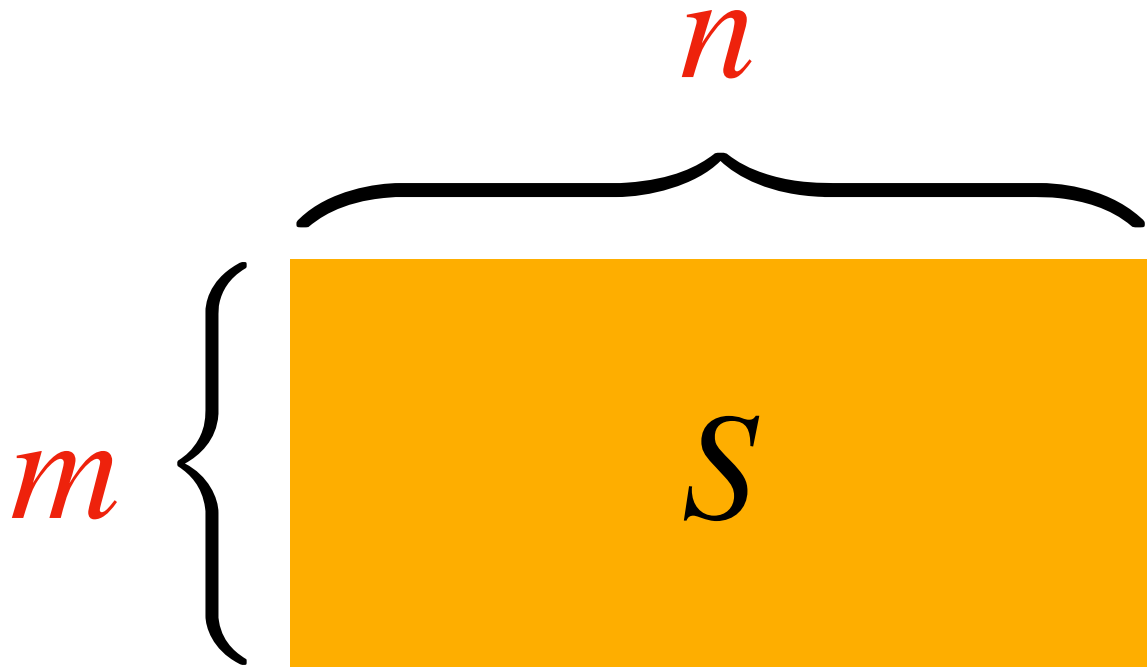
Turnstile Streaming

- 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

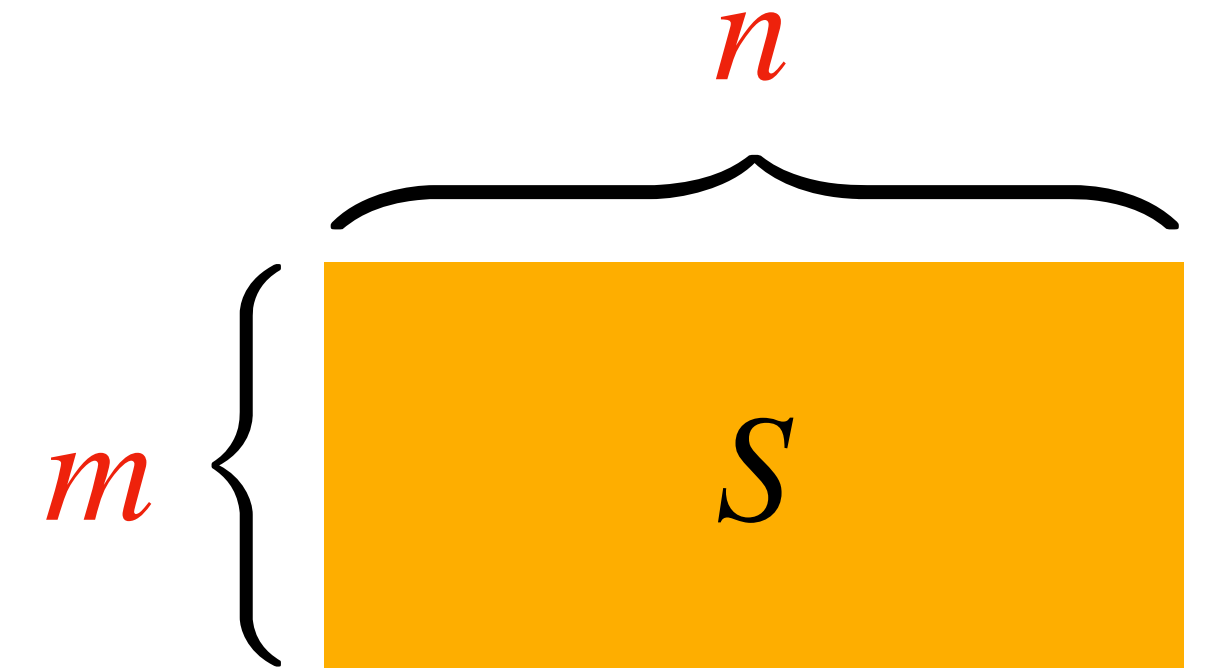
We will discuss how to obtain space-optimal algorithms with fast update times





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