

Section 5 Quick Check

Twitter wants a data structure to optimally store all of the tweets of the world based on how popular they are. An intrepid intern (you) suggest that since tweets are not comparable* that you use a Move to Front List to store all of the tweets. When someone writes a tweet it will be inserted, when someone retweets a tweet it is moved to the front.

What's the worst case running time of `find(tweet)`?

Let's do amortized analysis. What's the amortized running time if all tweets are, and will be **equally popular**?

What's the amortized runtime if all of the tweets are rubbish save **one magical tweet** from Ellen DeGeneres which everyone in the world retweeted?

What if the tweets follow a power law distribution?

* Are tweets not comparable? Is MTF the best we can do?