Goals

- Define DTIME, P, and EXP, our first complexity classes!
- Discuss real world connection

def: DTIME

Let $T: \mathbb{N} \to \mathbb{N}$. A Language $L \subseteq \{0,1\}^*$ is in $DTIME(T(n))$ iff $\exists$ a TM M that decides L in $O(T(n))$ steps.

ex: $DTIME(O(n \log n))$