S. KIMMEL

Come get graded quiz!

Announcements

- Self grade & reflection due Wed (more on this in class)

Honor Code Discussion: TLDR: It's important. Make sure you know it now so no problems later.

Self Grade & Reflection

Rubric:

Validity: logic ok?

Readability: Easy to read?

Concise: More complicated than needs to be?

Provide a point score for each category → V = x, R = y, C = z

Sample self-grade Activity...

Also

- Reflection - see resources on website for worksheet
- Where to find solutions - CANVAS, "Files"
- Timing - ~30 min (at most 1 hour)

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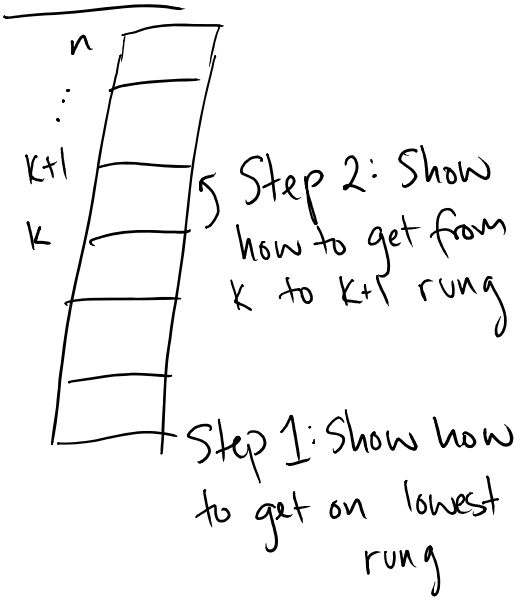
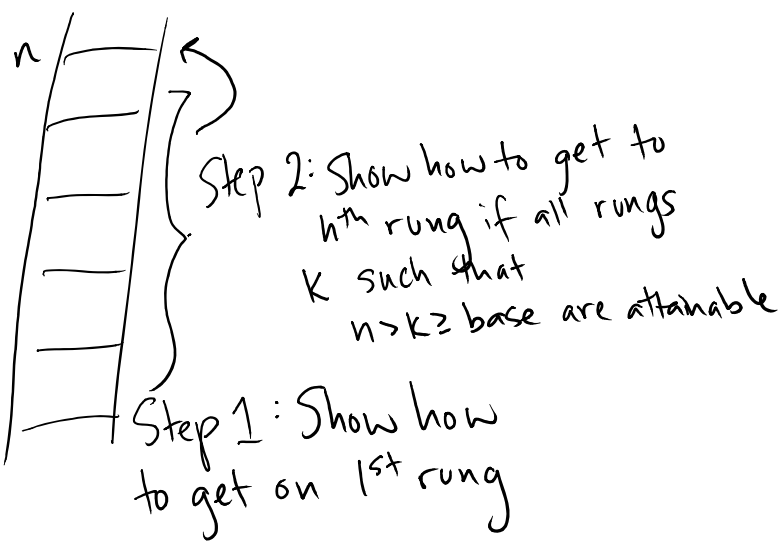
Induction



- Used to prove correctness of recursive algorithms where problem size decreases by 1 in recursion
- In Divide & Conquer if size goes from $n \to \frac{n}{2}$, instead, let $2^m = n$, then problem size decreases from $2^m \to 2^{m-1}$ in recursion. So do induction on m, not n!

Better for Divide & Conquer:

Strong Induction



If subproblems are not always exactly a factor of 2 smaller, this approach is better. Only need to show subproblem is smaller than n, but larger than the base case