

# Kaykunnii Babatunde - A.

## Homework 4 Answers

low: Count of ops is too few  $\rightarrow$  that can't be accurate if find actually works.

that would mean we're barely moving down = ~~too~~ few levels = small height

high: The countOps is way too high. This is inefficient for find b/c there'll be too many levels in the skip list, increasing runtime

moderate: perfectly in the middle. optimal/efficient countOps, runtime and find. This is our ideal value of  $p$ .

For all the low values of  $p$ , the runtime was ~~too~~ few because the height of the skip list will be too low. Similarly, when  $p$  is too high, the skip list will have too many levels. Both implementations create an inefficient skip list, and make find inefficient. However, the moderate value of  $p$  allows the list to be more accurate, and gives us an optimal runtime and accurate values.