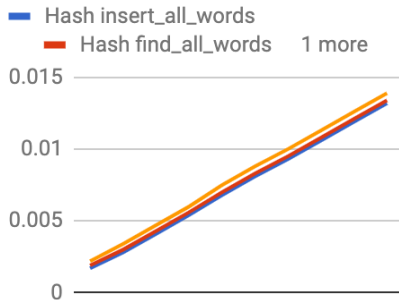


## MyHash:



Observed time complexity:

**Insert:  $O(1)$ .** Inserting  $n$  words takes  $O(1) * n = O(n)$  time, as observed in the graph.

**Find:  $O(1)$ .** Finding  $n$  words takes  $O(1) * n = O(n)$  time, as observed in the graph.

**Remove:  $O(1)$ .** Removing  $n$  words takes  $O(1) * n = O(n)$  time, as observed in the graph.

## STL Hash:



Observed time complexity:

**Insert:  $O(1)$ .** Inserting  $n$  words takes  $O(1) * n = O(n)$  time, as observed in the graph.

**Find:  $O(1)$ .** Finding  $n$  words takes  $O(1) * n = O(n)$  time, as observed in the graph.

**Remove:  $O(1)$ .** Removing  $n$  words takes  $O(1) * n = O(n)$  time, as observed in the graph.

Analysis: The STL hasher performed better than my hasher, but both performed  $O(1)$  on average.