

1.1 $\log_2 128 = \text{max num steps} = 7$

1.2 $\text{max num} = \log_2 256 = 8$

1.3 Binary search $O(\log n)$

1.4 linear search $O(n)$

1.5 $O(n)$

1.6 $O(A)$

2.1 list

2.2 linked list

2.3 array $O(1)$

2.4 Resizing array - Shifting elements

2.5 Searching Faster

array > hybrid > linked list

Inserting Faster

linked list > hybrid > array

① 3.1 The fun Greet2 will executed first
then it will popped of.
Then fun Greet will excute

3.2 will result in stack overflow