

1.1- $\log_2(128)=7$

1.2- $7+1=8$

1.3- $O(\log n)$

1.4- $O(n)$

1.5- $O(n)$

1.6- $O(n)$

2.1- linked list

2.2- linked list

2.3- array

2.4- the downsides of an array for inserts is slow, and when you add new users their names will be inserted at the end of the array so you need to sort the array everytime a name is inserted

2.5- searching slower than arrays faster than linked lists,
inserting faster than arrays and the same as linked lists

3.1- i have function named greet takes an name is maggie and contain another function named greet2 the greet fun is called first then the greet fun calls the greet2 fun.

3.2- stack overflow error