```
fun printFirst100(ns: List<Int>) {
    for (i in 0..100)
        println(ns[i])
```

treeSet += "a new element"

# Time Complexities Game





O(log n)

#### list.sorted()

list.sorted() has a medium time complexity of O(n log n) why is QuickSort being used and not a O(n log n) sorting algorithm?



### linkedList[index]

```
list.flatMap { list }
    .forEach { println(it) }
```

list.forEach { println(it) }

hashSet += "a new element"





























treeMap["key"]

## Time Complexities Game

```
O(1)
                                                                   O(log n)
fun printFirst100(ns: List<Int>) {
                                        treeSet += "a new element"
    for (i in 0..100)
                                        treeMap["key"]
        println(ns[i])
hashMap["key"]
hashSet += "a new element"
O(n)
                                                                    O(n^2)
linkedList[index]
                                        list.sorted()
list.forEach { println(it) }
                                        list.flatMap { list }
                                             .forEach { println(it) }
```

list.sorted() has a medium time complexity of O(n log n) why is QuickSort being used and not a O(n log n) sorting algorithm?

## Time Complexities Game

```
O(1)
                                                                   O(log n)
fun printFirst100(ns: List<Int>) {
                                        treeSet += "a new element"
    for (i in 0..100)
                                        treeMap["key"]
        println(ns[i])
hashMap["key"]
hashSet += "a new element"
O(n)
                                                                    O(n^2)
linkedList[index]
                                        list.sorted()
list.forEach { println(it) }
                                        list.flatMap { list }
                                             .forEach { println(it) }
```

list.sorted() has a medium time complexity of O(n log n) why is QuickSort being used and not a O(n log n) sorting algorithm?