Randomized QuickSort

↳ Pivot Element

↳ Randomly

randomQuickSort(arr, p, q): ⟹ Worst case scenario

```
random_pivot = random(arr, p, q)
swap(arr[random-pivot], arr(p))
return partition(arr, p, q)
```

⇓

$O(n^2)$

⇓

Less

QuickSort	Randomized QuickSort
Best case - $O(n \log n)$	Best case - $O(n \log n)$
Average case - $O(n \log n)$	Average case - $O(n \log n)$
Worst case - $O(n^2)$	Worst case - $O(n^2)$ ⇓ chances is quite less