Radix Sort (Time Complexity)

best, average and worst case time complexity of the radix sort algorithm. (Reading time: 1 minute)

TIME			SPACE
Best	Average	Worst	Worst
O(nk)	O(nk)	O(nk)	O(n + k)

Best, average and worst:

There are nested for-loops. We iterate over the outer for-loop **n** times, and the inner for loop **k** times. This results in **O(n×k)**.

Worst space: Outside the for-loops, there are four constant variables: **O(n)**, and inside the for-loops there are four constant variables: **O(k)**. This results in `O(n) + O(k) = O(n + k)`.

Now, let's move on to the Heapsort algorithm.