As the number of element increases, the O(n2) also ith takes larger to sort an array, while using O(nign) sorting algorith, maintaine the same time to sort (10,100,1000,10000) O(n) versus n 60000.00 50000.00 40000.00 30000.00 20000.00 – nlogn 10000.00 0.00 -20000 20000 40000 80000 100000 120000 60000 -10000.00 n

the Olhi algorithm increases quatratically, while O(n/ogn) increases logarithmically with number of elements.