

5	2	1	5	0	2	1	1	2	6
0	1	2	3	4	5	6	7	8	9

## Steps

- ① Find max  $\rightarrow O(n)$
- ② Define a new array of size  $O(n)$
- ③ fill out new array  $O(n)$
- ④ add the  $\frac{n}{2}$  to the power of 2
- ⑤ Sort the array  $O(n \log n)$

1	3	2	0	0	2	1	0	0	5	0
0	1	2	3	4	5	6	7	8	9	10

$O(n \log n)$

RADIX SORT

$O(nk)$

$k = \log_{10} C$

LSD to MSD

BUBBLE SORT

$O(n^2)$

$O(n)$