radix sort

- SAY WE HAVE THE FOLLOWING BASE 4 NUMBERS OF LENGTH 3

$$231 \quad 133 \quad 000 \quad 021$$
$$211 \quad 321 \quad 312 \quad 302$$
$$112 \quad 203 \quad 001 \quad 210$$

	0	1	2	3
ORDER BY LEAST SIGNIFICANT BIT	000 210	231 021 211 321 001	112 312 302	133 203
ORDER BY NEXT BIT	000 001 302 203	210 211 112 312	321 021	231 133
ORDER BY MSB	000 001 021	112 133	203 210 211 231	302 312 321

- THIS WAS RAN AS MANY TIMES AS THE LENGTH OF THE NUMBER