

1. No. Radix sort requires a stable sorting algorithm in its iterations to correctly sort.

Assuming we have the following array: [12, 13, 11];

We will sort from rightmost digit in base-10, which gives [11, 12, 13];

if the algorithm is not stable, when sorting the left digit, we may change the array into [13, 12, 11] which is an incorrect result

2. If every element have the same number of digits, the algorithm will still be correct, if the elements have varying length, then the algorithm may not produce correct result.

Ex: sort the following array from most significant digit in base 10: [9, 12, 456]

start from the left and repeat the process, we will sort the array as [12, 456, 9], which is incorrect.