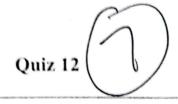
3rd Oct 2024



Roll number: BSSE230S8

## Q1. MCQ'S

i.	In	Radix	Sort,	if	an	array	contains	the	numbers	13, 5, 3	2, 9, 1],	what	will	be	the
in	teri	nediate	outpu	it a	fter	sorting	g by the le	ast s	ignificant	digit?	135	9			

A [1, 2, 3, 5, 9]

B) [3, 2, 5, 9, 1]

C) [1, 3, 5, 2, 9]

D) [2, 1, 3, 5, 9]

ii. Which of the following conditions is not required for Radix Sort to be applicable?

A) The array contains only positive integers.

B) The numbers have a fixed number of digits.

C) The input array can have varying digit lengths.

D) The array is unsorted.

iii. In Radix Sort, what is the role of the Counting Sort function?

A) It generates random numbers.

B) It sorts the array based on a specific digit.

C) It calculates the maximum value in the array.

D) It initializes the array.

	Q2. Sort 1 ach step.	the followi	ng array	by using	Radix sort	t. Explair	and hig	hlight the	changes in
/ 1	<u> </u>	/		3	۲	5	6	7	1
	170_	45_	75_	99	802	24	2_	66	
		the time co	(-0)	nk)	12	10/2	1611	12 12	- 10 10 0 - 10 10 0
ره)	e find	Man aleulut	numb e one osoit	er. fir mube	st is en of the	Thich unit plo undrec	is 800 des	2. Politika Pola co	NJ SORT
luctions, surs plan	(Pa)	90.	2 802	3 2.	124	145	179	5/66	
	_2	) 12. [02	10 ZY.	13/ 1945	266	170 0		7 290	d Algorithms
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