## LINEAR SEARCH

Thes search method searches for an element lay was vesting all the element sequentially rintill the element of found for array fensiles. It follows array traversal.

WC complexity - O(n)

BINARY SEARCH

	This search method searches for an	
	element by breaking the search space	
	Into half each time It finds the wrong	
	element. They method by binsted to a	
	sosted array. The seas search continues	
	towards of the med, based	
	on whether the element to be searched	
	Is lesses as greater than the med-element.	
	A LOUIS A LOUIS TANK	
-)	lenly sorted array	
<del></del>	Only sorted array WC complently = O(Logn)	
	terial laws - John A	
	Inear search	Benary Search
1)	Jenear search Works con both sorted & rensorted	1) Works only on xosted array
	softed & renorted	xorted array
	array	4:0
		A Servitor or out N.
2)	Equality operations	2) greaualsty operation
	27.0.20.10	y virey view vy conjuntation
3)	O(n) WC Complexity	3) O (log o) W/
	o(n) ve stangeting	Complexity
		-c. young
	# Griclude (Std8orh)	
	Tranual Column	
	Pr+ 10-000 / 1 /0 18 (7 0 + 0)	
	Ont Denear Search Cont & aux [] ant size,	
	ent element)	
	for (gnt i=03 3< size 3 3++)	
	1/ Ser and 11-17 8 22 20-47 8 10 10 10	
	3f (ass[i]== element)	
	The transfer of the second of	
	seetusn ij	
	21	
	J	

3 Deturn - 13 Ent lenary search (ant ars []; Int size,
Int element) Ent low, med, hegh; high = size-Is 11 Keep searching rental low = high nohole (low = hagh) ( med = Clow + hagh)/25 of (air [med] == element) ( return med) Sf (array[mad] (element) & Jour=mad+13 else & hegh = med-13 oceturn-1; For topped and leath and Post soil gpt magn () f // Unsorted array for lenear search // ent arr []= 41,3,5,56,4,3,23,4,5, 54634,56,349; // Int size= size-of(arr)/size of (int);

Il sorted array for lanary search int arr [7=d1, 3, 5, 56, 64, 73, 123, 225, 4444; ent size= size of(ars)/ségeref cent); ent element= 444; got search 9 nden = binary search Carr, size, element); prentfC'The element % d was found at enden % d'n" element, search Indens O/P: The element was 444 was found at Inden