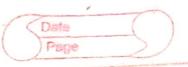
DFT uses succussive function For an array of state size n = 2m DFT of n size array - DFT of n size array + Number x DFTel No. of operations we be Fo For multiply a number w'x with each momber of post For summing each element of

2 n size array/ operations at this steps = n + n Total Now similarly to compute DFI of n SIZE we need a stumber of operations But the have to compute 2 DFT ob £ 5128



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	Thus, total mumber of operation in calculating att need in size as	
2.	numbers of n size array = 2xn	
2	- N	
5	Similarly, to compute the DFT of n	
+.	Size array, we need to perform. n numbers of operation. But	
-45 m		
1	ive noed 9 DFT of 4 n size array	1
	Thus, total numbers of operations = 4xn	
G su	The state of the angle of the state of the s	
	Similarly, going to lost minium size. We need only I operation to perform	
	we need only I operation to perform	
_	But we need to calculate DFT of n such	-
	But we held to columnate DFI of h such	
	of operations need intotal = n	
	Total of operation needed operall	_
	= n+n+n+mtimes	·
	But $n - 2^m = m = \log_2 n$	
	- nt n+nt - logn n times	<u> </u>
	Thus, alograthm is O(n logzn)	
	Thus, alograthm is O(n logzn)	1