Aporay Implementation of Queue Here, well maintain index votuble BACKIND, to store the index of the treatingent element. Bo, when we injust an element, we just instrument the value of the BACKIND and to inject the element at the curitery BACKIND value. Follow the attray below to know how inserting worthy. 7 11 18 2 5 2 3 14 5 6 47 18 BACKIND Now suppose we want to tremove an element from the queue. And since queue follows the FIFO discipline, we can only remove the element at the zeroth index, as that is the element injerted piret in the greve son now we

	Page No
H	ill rumpue the element at the zoroth index and shift all the elements to its adjacent
de la	the second second
The same of the sa	7 11 18 2 5 8
	BACK IND
	11 18 2 5 8
4	BACKIND LA COLLINS
	was the maritary law on the
7	But this removal of the zeroth element and
	shifting of other elements to their immediate
	shifting of other elements to their immediate left Jestures O(n) time complexity.
	The summer of the state of the
- 03	Ensertion (enqueue)
	-> Increment BACK 2ND by In
	-> Injert the elements of
	-) Time complexity: O(1)
	Company Lander (C)
0	-> Remove the element at the zeroth index
-	-, Remove the element at the zeroth index
/	-> Sheft all other elements to their immediate
1	left.
1	-> Decrement BACKIND by 1.
	Service State of the Service Property Control of the Service State of the Service State of the Service Service State of the Service Sta
(5)	Hote, Day first element is at index O, and the rusting floor shot the tusting the floor should be the transfer of the transfer to the transfer the transfer to
	The state of the s
0	Condition por que empty Back IND = -1.
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	Page No
(4)	Condition for queues full: BACK310 = 35ZE-1.
_)	Can there be a better way to accomplish these tasks? The answer is yes.
e de la companya de l	-> We can use another index vortiable called FRONFIND, which stores the index of the cell just before the first element. We'll maintain both these indices to bring about all our operations. Let's now enly the changes we'll see after me introduce
in in group	this new votubble:
•	Insertion (enqueue): -> Encrement BACKSND by 1. -> Insert the element. -> Time complexity: O(1).
	
Araby.	Remove the element at the zeroth index (no need for that in an array.) Therenent FRONGIND by 1. Time complexity: O(1).
(3) >0(4)	Our first element is at index FRONZEND+1 and the treatment element is at index BACKEND.
(1)	Condition for opene empty: from 200 = BACK300

Page	No	
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			11	18	12	5	8			2			
		1					1						Springs
	F	RON	राजाइ	,			BACK	QUE	ale and a second		-		