

DSA Assignment No. 03

Title: Circular queue lineardata structure Aim: To implement circular queue using Am as linear data structure. Problem Statement: Implement chreular queue Amay as linear list, Perform tollowing operation On it. a) Insertion (Enqueue) b) Deletion (Dequeue) c) Display Chiedries: To understand the simple queue as linear structure with its limitations understand & implement circular queue with ama and perform various operations on lt. Know possible applications of queues. Cutcome: Able to overcome the simple queue. I imitations by implementing circular queue Implement different operations like insert delete on the circular queue. Able to implement real time applications win queue.		
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Able to implement real time applications using	Implement different operations	s like insertf
Able to implement real time applications using	delete on the circular queue.	
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- 즐거지 못하는 이번 이번 이번 이번 이번 시간에 보고 있다면 보다는 이번 사람들이 되었다면 하는데 되었다.		





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	Thean:
	Concept of queue as a linear data structure:
	queue: It is an collection of items from which
	items may be deleted at one end it follow first
	in finst-out pre-principle
②	Simple queue ADT:
	enqueue ();
	using enqueue() method, we can invert eleme
	in queue
entre province de la company de la compa	
	deque();
	using deque() method, we can deleted l'ast element which first inserted
TABLE TO THE OWNER OF THE OWNER OWNER OF THE OWNER OWN	element which that inserted
THE HOUSE WAS CONTINUED AS NOT SHARE	
	is Empty();
	using this method we can determine queve is
THE TOTAL STATE OF THE PARTY OF	empty or tot
<u> </u>	craphical representation:
on and an analysis of the second	(1012345
	frenk!
	-Rest



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	To insert: put new element in location of
	rear = 0, front 0
	AND THE PROPERTY OF THE PROPER
	to delete: remove from oth localtion & Front-1
2.0	Limitation of simple queues & possible solution
	A CONTRACTOR OF THE CONTRACTOR
	In simple queue:
	when new item inserted at reen, pointer to rear
	moves upwards and if Hern is deleted front
	manuel desonional
rigi affiliana sifi i Saliki <u>a-</u> -	After a few insert and delete operations
	The man might reach the end of the queue,
- C	and no more items can be inserted although Items from front deleted and these is space
	Items from front deleted and these is space
	in queue
	circular queue and îte advantages Over simple queue:
	queue:
	10 10 dala otullara la colorata
	Circular queue 18 17 near dont a structure 12 which
	the operations are planned performed on FIFO
	principle and last position is connected back to
	first position to make chule
	문에는 마른 사람들이 되었다. 보고 있는 경기를 보고 있는 다른 사람들이 되었다. 이 전에 가장 보고 있는데 보고 있는데 그런데 되었다. 그는데 그런데 그런데 그런데 그런데 그런데 되었다. 그런데



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	Adrantages:
	In circular quoue use utilize memory efficiently
Country of	
	and thank is in eveniented by I , but they
	is sol mad in for so when we perform the
ne dia dia dia	societion and deletion operations memory inviers.
	D. I in Charles are memory is will red I we
	delete any element, that position is used later
g sed/ in	because it circular
	I would be the first of the second of the se
	2 front co
2001	neon = 0
1 1 July 2 2 1	Dell to to to the second secon
en ett	(empty anulos queue)
(25,41)	The second of th
	circular queue possible implementation:
Light L	ati Changa
	To give possible movement inside away, when we go post the last element, it should come
	ae go post the last element, it should come
	back to beginning of the away.
	0170
	Expression: 1=(1+1)% man_size
	Front = (front+1) % length
	rear = (rear +1) 1/1 length
	사용하다. 1915년 1일 전 <mark>문문문문</mark> 경기에 되는 사람들이 되는 사람들이 되었다. 1915년 1일



(3)

FIG. FUNE	
	Application of queue!
	Real life examples:
	1 coaiting in line
	· coaiting on hold for support
	Applications in computer Science:
	- typical use of queues are in Simulations los.
	- In os, for controlling access to shared system
	- resource, computer system must often provide a ! holding our! from message between 400
	a holding our from message between 400
Alexandra	process K/a buffer 1 & it is impleted as quare
	validations.
	Array size should be in range I to man not
\odot	negative zero or more that max size.
6	Name must not contain numbers
(3)	Age Should be positive
(-)	
	conclusion!
	나는 그 집에 이 아이들은 그 이 그는 것이 되어 가장 이 없는 이렇게 그리고 그리는 그리고 있는데 모든 그리고 있는데, 그리고 있는데, 그리고 있는데, 그리고 있다면 없었다.
	Analoysis of insertion & deletion of operation in circular queue.
	in circular queue.



1 / J. 1	Operation Time complaxity
	Enqueue 0(1)
	the state of the s
(D)	Dequeue O(1)
	and the contract of the contra
	King a received of the state - in the second
	this or and of the house of secretary the
human A	effection of the second of the
West Labor Co. A.	Language of the second material and the second of the seco
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	1 1 1 1 20 V
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	Cally in Animals for Live Branch 188
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