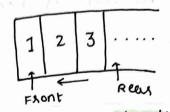


→ Queve is a linear Data structure base on FIFO (First in First Out).

- → It has front and rear pointer to track first and last element.
- Deque is double ended flueve.



* In Java, Queve is an interface and not a class so we don't directly implement Queve. (Same like list)

* We use linked list and Assay Dequeve (there are classer) to implement queve. There classes implement the queve interface.

Iterable
(Interface)

Textends

(Interface)

extends

* Choose linked list for implementation when:

1. We need dynamic rize

2. Efficient front and reas

* Choose Assay Dequeve when:

1. Queve nay fixed size.

2. We need alot of Landom access.

3. Lower memory usage.

Paiolity implements (Interface)

Queve ((1945)

Deque implements (Interface)

(class)

Assay Dequere

Queve Syntax:

Queve (Datatype) queve = new linkedlist () ();

Operations performed on Queve.

Enquere	0(4)	
chquere	0(1)	Adds element to rear of the queve.
Dequeve	0(1)	Removes element From the Front.
Peek	0(1)	Returns the front element without removing it.
Empty	0(1)	checks in greve is empty .
Foll	0(1)	Checks it Queve is FUI)

	2 First monday to make a now 1019/ Planton
	PAGE NO.
	Implementation of Pueve: - (roder for imprementation
	ase done)
	1. Using Ayay:
	Fixed size. "D"
	remove o(n) essessant (s) x + desidad (s)
	- we can implement circular queve ~
	(1) thughants = M)
	Ciscular Queve. (42) 5600 p
	aeld $O(1)$ (Reas + 1 = front) \rightarrow full
17.1	peek oc1) Reay = -1
	remove O(1) / front=-1.
	3 / 12 - 12 10 12 - 12 - 2 - 2 - 2 - 14 10 - 12 - 6 iou 2 i-10 12 - 2 J J - 9
ລ	· Using linked List: - [as] will be
	+ efficient addition and removal
	· (() () () () () () () () ()
	1 2 3
	Front 18eur (H3) 66,0-P
	they consoling,
	Points to semembes:
<u> </u>	The collection framework functions of queue depend
→	the collection framework what is this seturn
	on both, what do they do and what is this setusn
	type.
	in the second of
\rightarrow	Priority Queve and linkedlist are not thread safe
	implementations (194 + 1) 1399 (2) 1002
	Distill Blocking Queve is one alternative
	implementation if thread safe implementation is needed.