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- 1. Write the algorithm of queue mechanism using
 - Single linked list
 - Array alternative 1
 - Array alternative 2
 - Array alternative 3
- 2. Use the same infotype as before
- 3. Each member is to write 1 mechanism

Jawab:

· Single linked list

Algoritma:

- Simpan 2 reference: front → ... → back
 □ enqueue(Benda x):
 - ❖ Buat sebuah node baru N yang datanya x
 - ❖ if queue sebelumnya empty, maka front = back = N
 - else tambahkan N di akhir (dan update back)
- dequeue():
 - **❖** Hapus elemen pertama: front = front.next
- · Array alternative 1

Algoritma:

Add(P,3)	
Add(P,4)	
Add(P,2)	
Del(P)	
Del(P)	
Add(P,5)	
Del(P)	
Del(P)	

1	2	3	4	5
3	4	2		

Head = 1

Tail = 3

Is empty = True

1	2	3	4	5
2				

Head = 1

Tail = 0

Is empty = True

			Г	Г	Г		
	1	2	3	4	5		
	5	2					
	ad = 1						
Tai							
Is e	empty = True						
	1	2	3	4	5		
	ad = 0						
Tai							
Is e	empty = False						
	ray Alternativ	e 2					
Algori							
	d(P,3)						
	d(P,4)						
	d(P,2)						
	l(P)						
	l(P)						
	d(P,5)						
	l(P)						
	d(P,6)						
	d(P,7)						
	Del(P)						
	Del(P)						
De	l(P)						
	1	2	3	4	5		
	3	4	2				
Не	ad = 1		•	•			
Tai	i1 = 3						
	empty = True						
	1	2	3	4	5		
	2						
He	Head = 1						
	Tail $= 0$						
	Is empty = True						
	1	2	3	4	5		
	5	2		'			
He	Head = 1						
	Tail = 2						
	Is empty = True						
13 ($\frac{1}{1}$	2	3	4	5		
	2	<u> </u>	3	7	<i>J</i>		
1	<u> </u>						

Head = 1							
Tail $= 0$							
Is $empty = True$							
1	2	3	4	5			
7	6	2					
Head = 1	l						
Tail $= 3$							
Is $empty = True$							
1	2	3	4	5			
Head = 0							
Tail $= 0$							
Is empty = False							
1 7							
· Array alternative	2 3						
Algoritma:							
Add(P,3)							
Add(P,4)							
Add(P,2)							
Del(P)							
Del(P)							
Add(P,5)							
Del(P)							
Add(P,6)							
Add(P,7)							
Add(P,8)							
Del(P)							
Del(P)							
Del(P)							
Del(P)							
1	2	3	4	5			
3	4	2	т	3			
Head = 1	Т						
Tail $= 3$							
Is empty = True							
1s empty – 11uc	2	3	4	5			
2		3	4	3			
Head = 1							
Tail = 0							
Is empty = True	2	2	4	~			
1	2	3	4	5			
5	2						

Head $= 1$						
Tail $= 2$						
Is $empty = True$						
1	2	3	4	5		
2						
Head = 1						
Tail $= 0$						
Is $empty = True$	Is empty = True					
1	2	3	4	5		
8	7	6	2			
Head = 1						
Tail $= 3$						
Is empty = True						
1	2	3	4	5		

Head = 0

Tail = 0

Is empty = False