

Circular Array "Queue"

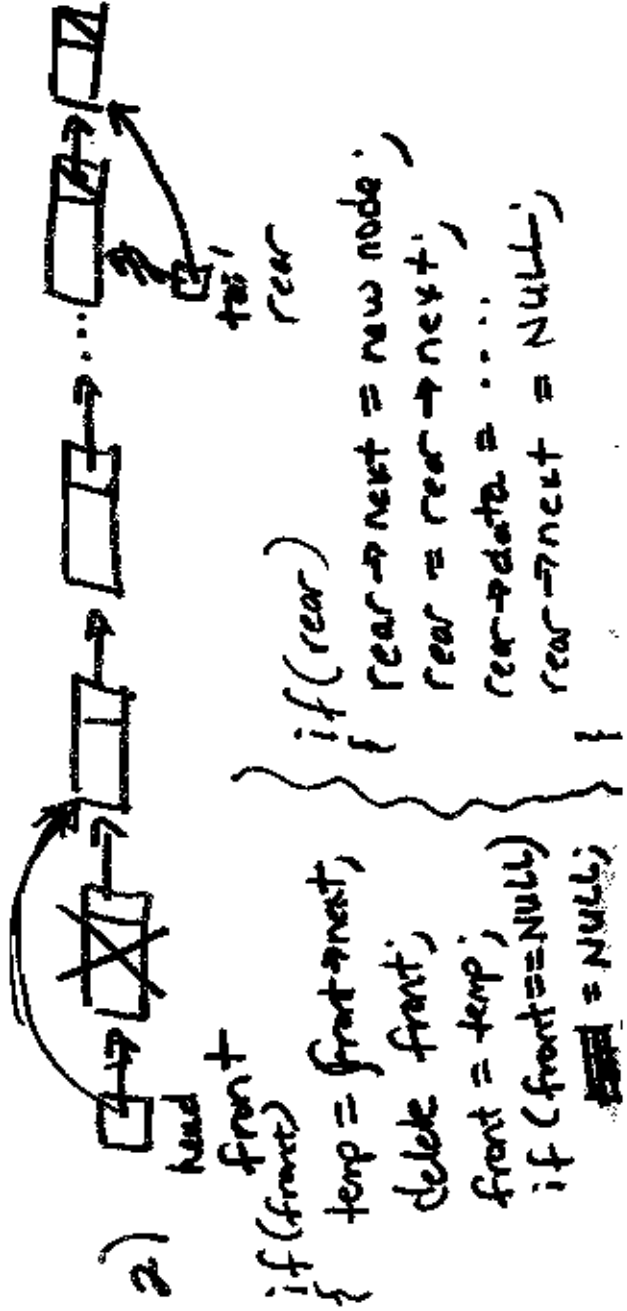
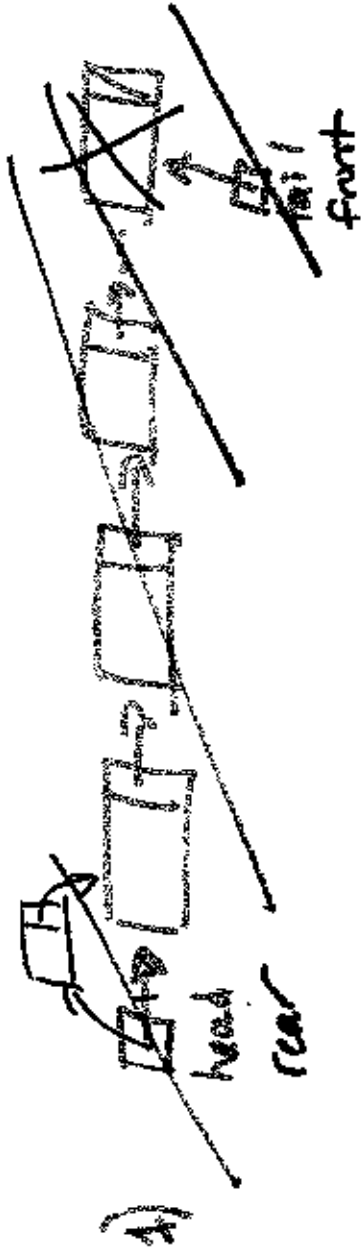
++front;

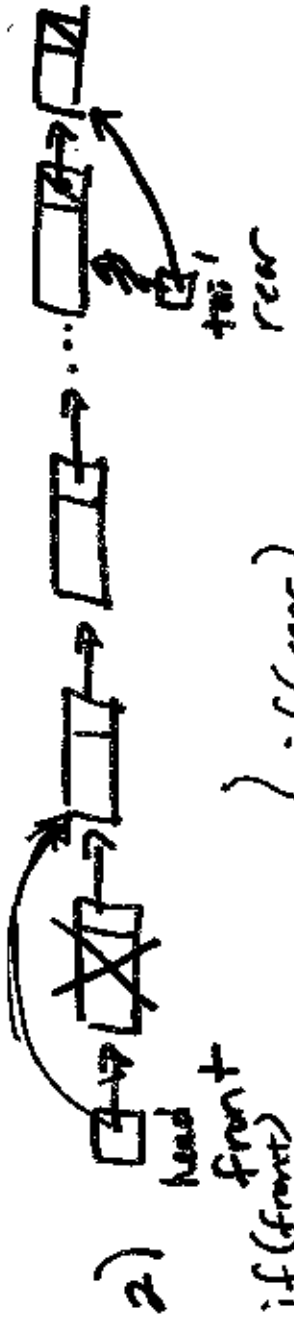
front % = size; } $\phi - (size - 1)$

array[front] =
~ 5 op & fetches

$(++front) \% = size;$

LLL - Queue





2)

```

if (front)
{
    temp = front->next;
    delete front;
    front = temp;
    if (front == NULL)
        rear = NULL;
}

```

```

if (rear)
{
    rear->next = new node;
    rear->next->next = NULL;
    rear->data = ...;
    rear->next = NULL;
}
else
{

```

```

    front = new node;
    front->data = ...;
    front->next = NULL;
    rear = front;
}

```

LLL - Queue

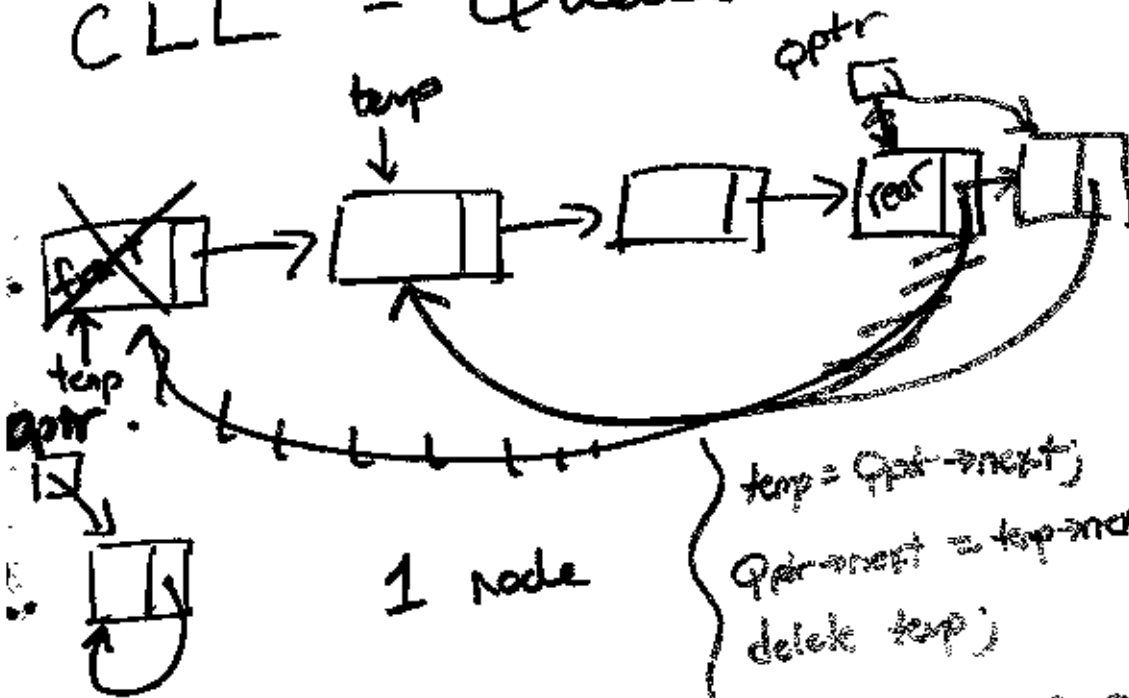
Enqueue

$$10 \text{ ops} + 5 \text{ f} \approx 16 \text{ op/fetches}$$

Dequeue

$$6 \text{ ops} + 5 \text{ f} \approx 11 \text{ op/fetches}$$

CLL - Queue



1 Node

Empty List

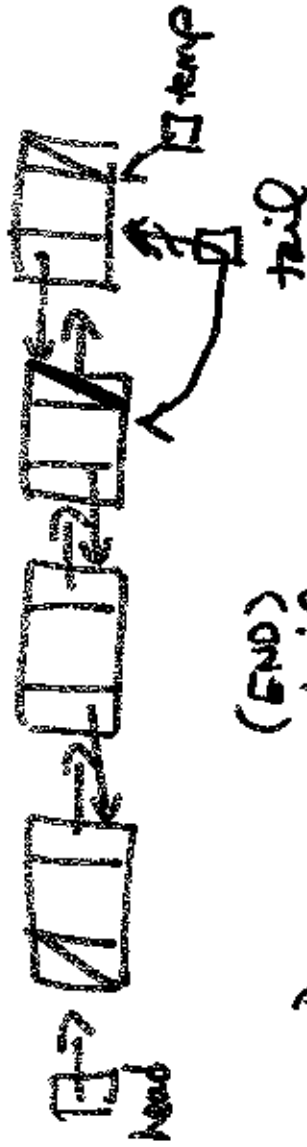
```
temp = Qptr->next;
Qptr->next = temp->next;
delete temp;
```

```
Qptr =
temp = Qptr->next;
Qptr->next = new node;
Qptr = Qptr->next;
Qptr->next = temp;
```

1.  pointer
Qptr

DLL - Deque

QUESTION : 24. 20.10.2017. 11:24 AM. 20.10.2017. 11:24 AM. 20.10.2017. 11:24 AM.



Deque @ tail
(END)

```
temp = tail;  
tail = tail -> prev;  
tail -> next = NULL;  
delete temp;
```

Node * current = head;

Node * previous = NULL;

while (current && current->data

!= match)

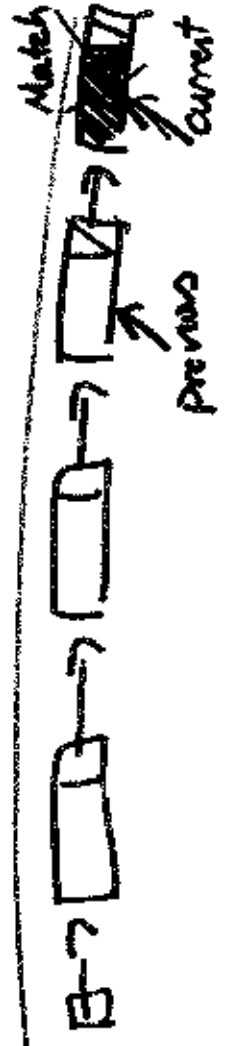
{

previous = current;

current = current->next

6 fetches + 7 ≈ 13

}



Node *current = head;
if (current)

while (current->next &&
current->next->data != match)

current = current->next;

}
100 + 7 = 107

