

QUEUE	SINGLY LINKED LIST	DOUBLE LINKED LIST	DOUBLE LINKED LIST
peek()	Insert at front	Delete from last	Insert at end
<pre>begin procedure peek() return queue[front] end procedure int peek(){ return queue[front] }</pre>	<pre>//insertfront(head,x) { newnode=create newnode newnode->data=data newnode->next=null if(head!=null) newnode->next=head head=newnode end</pre>	<pre>if(head==null) underflow else set temp=head repeat while (temp->next!=null){ temp=temp->next } temp->prev->next=null free(temp) exit</pre>	<pre>temp=head while(temp!=null) { temp=temp->next } temp->next=newnode newnode->prev=temp newnode->next=null</pre>
QUEUE	SINGLY LINKED LIST	DOUBLE LINKED LIST	DOUBLE LINKED LIST
isEmpty()	Insert at end	Delete from any position	Insert at any position
<pre>begin procedure isEmpty() if(front<MIN front>rear) return true else return false endif end procedure OR bool isEmpty() { if(front<0 front>rear) return true else return false }</pre>	<pre>//insertend(temp,head) { newnode->next=null temp=head while(temp->next!=null) do temp=temp->next end while temp->next=newnode newnode->next=null }</pre>	<pre>if(head==null) underflow else temp=head repeat while(temp->data=item){ temp=temp->next } if(temp->next==null) return else ptr=temp->next temp->next=ptr->next ptr->next->prev=temp free(ptr) exit</pre>	<pre>temp=head for(i=0;i<loc;i++) { temp=temp->next if(temp==null) { return }} ptr->next=temp->next ptr->prev=temp temp->next=ptr ptr->next->prev=ptr</pre>
QUEUE	SINGLY LINKED LIST	SINGLY LINKED LIST	CIRCULAR QUEUE
isFull	Insert at any position	Delete from any position	Initialization & Display
<pre>begin procedure isFull() if(rear==MAX_SIZE-1) return true else return false endif end procedure OR bool(isFull()) { if(rear==MAX_SIZE -1){ return true else return false} }</pre>	<pre>//insertatanypos(head,x,pos) { temp=head while(i<pos) temp=temp->next i++ endwhile newnode=create newnode newnode->data=data newnode->next=temp->next temp->next=newnode }</pre>	<pre>//deleteany(head,x,pos) { i=0 temp=head while(i<pos) { ptr=temp temp=temp->next i++} ptr->next=temp->next free(temp) }</pre>	<pre>queue() begin front=rear=-1 repeat for i=0 to MAX-1 queue[i]=0 end AND Disp() begin for i=0 to MAX-1 do write que[i] end for end disp</pre>
QUEUE	SINGLY LINKED LIST	SINGLY LINKED LIST	CIRCULAR QUEUE
enqueue	Delete from last	Delete from front	dequeue
<pre>procedure enqueue(data) if queue is full return overflow endif rear<-rear+1 queue[rear]<-data return true</pre>	<pre>//deletelast(head,temp,ptr) { if(head->next=null) temp=head head=null else temp=head while(temp->next!=null) ptr=temp</pre>	<pre>//deletefront(head,temp) { if(head==null) no list</pre>	<pre>begin if(front== -1) then write "queue is empty" else write "element dequeued is %d",queue[front] queue[front]=0</pre>

```

end procedure
OR
if enqueue(int data)
if(isFull())
return 0;
rear=rear+1;
queue[rear]=data;
return 1;

```

QUEUE

dequeue

```

procedure dequeue
if queue is empty
return underflow
endif
data=queue[front]
front<-front+1
return true
end procedure
OR
int dequeue() {
if(isEmpty())
return 0;
int data;
data=queue[front];
front=front++;
return data;
}

```

SINGLY LINKED LIST

Initialization

```

struct node
{
int data;
}
struct node *next;
struct node * head = null,
struct node *newnode;
newnode=(struct node*)malloc-
(sizeof(struct node))
newnode->data=data;
newnode->next=null

```

```

temp=temp->next
ptr->next=null
free(temp)
}

```

CIRCULAR QUEUE

enqueue

```

begin
if(front==(rear+1)%MAX)
print queue is full
else read x
if(front==0)
front=rear=0;
else
rear=(front+1)%MAX
queue[rear]=x
endif
end enqueue

```

DOUBLE LINKED LIST

Delete from front

```

if(head==null)
underflow
set ptr=head
head=head->next
head->prev=null
free(ptr)
exit

```

```

else
temp=head
head=head->next
free(temp)
}

```

DOUBLE LINKED LIST

Initialization

```

struct node
{
struct node *prev
int data
struct node *next
}
struct node *head

```

DOUBLE LINKED LIST

Insert at front

```

if(head==null) do
newnode->next=null
newnode->prev=null
newnode->data=item
head=newnode
else
newnode->next=head
head->prev=newnode
newnode->prev=null
head=newnode

```

```

if(front==rear)
front=rear=-1
else
front=(front+1)%MAX
end dequeue

```



By **deo**
cheatography.com/deo/

Published 2nd August, 2023.
 Last updated 2nd August, 2023.
 Page 1 of 2.

Sponsored by **ApolloPad.com**
 Everyone has a novel in them. Finish
 Yours!
<https://apollopad.com>