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## Memory efficient doubly linked list

Asked by Varun Bhatia.

### Question:

Write a code for implementation of doubly linked list with use of single pointer in each node.

### Solution:

This question is solved and very well explained at <http://www.linuxjournal.com/article/6828>.

We also recommend to read [http://en.wikipedia.org/wiki/XOR\\_linked\\_list](http://en.wikipedia.org/wiki/XOR_linked_list)



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**Dark Protocol** • 2 years ago

Beautifully Answered!!!

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**Sajal Sharma** • 2 years ago

use xor link list....

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**abhishek08aug** • 3 years ago

Intelligent :D

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**nandu** • 3 years ago

```
#include
```

```
#include
```

```
using namespace std;
```

```
class dlist
```

```
{
```

```
struct node
```

```
{
```

```

int data;
node *link;
};
node *head,*tail;

public:
dlist(){head=tail=NULL;}

~dlist()
{
node *prev,*current,*temp;

```

[see more](#)

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**nandu** • 3 years ago

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```

[see more](#)

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**rajx** • 5 years ago

```

#include
#include

typedef struct nod
{
    int data;

```

```
struct nod * next;  
}node;  
  
void insert( node ** head , int data , node ** tail)  
{  
    node * temp = (node*)malloc( sizeof(node) );  
    temp->data = data;  
    temp->next = NULL;  
  
    if ( !(*head))  
    {
```

[see more](#)

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**suresh kumar mahawar** → rajx • 2 years ago

@rajx there is a case miss for single node.

here is your code with modification <http://ideone.com/vErgLZ>

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