XOR Linked List

```
struct Node
{   int value ;
    struct Node *next ;
    int xor ;
};

    typedef struct Node * NODE

NODE create ()
{   NODE p = (NODE) malloc (size of (struct Node));
        return p ;
}

NODE insert_front (int item, NODE head)
{   NODE p = create () ;
    p→ value = item ;
    p → next = head
    head → xor = p^(head → next) ;
    head = p ;
    return head ;
}


NODE insert_end (int item, NODE head)
{   NODE p, q ;
    q = create () ;
    q → value = item ;
    p = head ;
    while (p→ next != NULL)
    {   p= p→ next ; }    p→ next = q
    q→ xor = p^(NULL)
        q→ next = NULL ;
}
```