

Queue:

```
public void exchange(int i , int j)
{
    Node <T> pi = head ;

    for(int k = 0 ; k < i ; k++)
        pi = pi.next;

    Node <T> pj = head;

    for ( int k = 0; k < j ; k ++ )
        pj = pj . next ;

    pi.data = pj.data;
}
```

```
public void exchange ( int i , int j )
{
    T tmp = nodes[( head + i ) % maxsize];
    nodes[(head + i) % maxsize] = nodes[(head + j) % maxsize];
    nodes[(head + j) % maxsize] = tmp ;
}
```

Double Linked List

```
public void removeLast()
{
    if (head.next == null)
    {
        current = head = null ;
        return ;
    }

    DNode <T> p = head;

    while (p.next != null)
        p = p.next;

    p.previous.next = null;

    if (current == p)
        current = head ;
}
```

Linked List

```
public void exchange(int i,int j)
{
    //Go to ith node
    current = head;

    for (int k = 0 ; k < i ; k++)
        current = current.next;

    //Save ith node
    T temp1 = current.data;

    //Go to jth node
    current = head;

    for (int k = 0 ; k < j ; k++)
        current = current.next;

    //Save jth node
    T temp2 = current.data;

    //Replace jth node by ith node
    current.data = temp1;

    //Go to ith node
    current = head;

    for (int k = 0 ; k < i ; k++)
        current = current.next;

    //Replace ith node by jth node
    current.data = temp2;
}

public void findPrev()
{
    Node<T> p = head;

    while(p.next != current)
        p = p.next;

    current = current.next;
}
```

```
public void reverse()
{
    if (head != null && head.next != null)
    {
        Node<T> p = null;
        Node<T> cur = head;
        Node<T> q = head.next;

        while(cur != null)
        {
            cur.next = p;
            p = cur;
            cur = q;

            if (q != null)
                q = q.next;
        }

        head = p;
    }
}
```