Given a singly linked list *L*: *L*0→*L*1→…→*Ln*-1→*L*n,  
reorder it to: *L*0→*Ln*→*L*1→*Ln*-1→*L*2→*Ln*-2→…

You may **not** modify the values in the list's nodes, only nodes itself may be changed.

**Example 1:**

Given 1->2->3->4, reorder it to 1->4->2->3.

**Example 2:**

Given 1->2->3->4->5, reorder it to 1->5->2->4->3.