```java
package linkedlist;

// Java program to sort a linked list of 0, 1 and 2
class LinkedList35
{
    Node head; // head of list

    /* Linked list Node*/
    class Node
    {
        int data;
        Node next;
        Node(int d) {data = d; next = null; }
    }

    void sortList()
    {
        // initialise count of 0 1 and 2 as 0
        int count[] = {0, 0, 0};

        Node ptr = head;

        /* count total number of '0', '1' and '2'
         * count[0] will store total number of '0's
         * count[1] will store total number of '1's
         * count[2] will store total number of '2's */
        while (ptr != null)
        {
            count[ptr.data]++;
            ptr = ptr.next;
        }

        int i = 0;
        ptr = head;

        /* Let say count[0] = n1, count[1] = n2 and count[2] = n3
         * now start traversing list from head node,
         * 1) fill the list with 0, till n1 > 0
         * 2) fill the list with 1, till n2 > 0
         * 3) fill the list with 2, till n3 > 0 */
        while (ptr != null)
        {
            if (count[i] == 0)
                i++;
            else
            {
                ptr.data= i;
                --count[i];
                ptr = ptr.next;
            }
        }
    }


    /* Utility functions */

    /* Inserts a new Node at front of the list. */
    public void push(int new_data)
    {
        /* 1 & 2: Allocate the Node &
                  Put in the data*/
        Node new_node = new Node(new_data);

        /* 3. Make next of new Node as head */
        new_node.next = head;
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        /* 4. Move the head to point to new Node */
        head = new_node;
    }

    /* Function to print linked list */
    void printList()
    {
        Node temp = head;
        while (temp != null)
        {
            System.out.print(temp.data+" ");
            temp = temp.next;
        }
        System.out.println();
    }

    /* Driver program to test above functions */
    public static void main(String args[])
    {
        LinkedList35 llist = new LinkedList35();

        /* Constructed Linked List is 1->2->3->4->5->6->7->
        8->8->9->null */
        llist.push(0);
        llist.push(1);
        llist.push(0);
        llist.push(2);
        llist.push(1);
        llist.push(1);
        llist.push(2);
        llist.push(1);
        llist.push(2);

        System.out.println("Linked List before sorting");
        llist.printList();

        llist.sortList();

        System.out.println("Linked List after sorting");
        llist.printList();
    }
}
/* This code is contributed by Rajat Mishra */
```