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6. List Functions and Maxsort with Lists

Implement your own Linked List of Integers. Distinguish between nodes and lists of nodes. Implement the following methods for these lists:

- `Node extractMax(List l)`, which extracts the node with the maximum value out of the list, that is, it returns the node *and* deletes the node from the list (what are the options if the list contains duplicates?);

- `void append(List l, Node n)` and `void append(List l1, List l2)`;

- `void printList(List l)`;

- `void deleteNode(List l, Node n)`;

- `void insertAt(Node n, List l, int pos)`, where the node `n` is inserted into the list `l` at position `pos`, or if `pos` does not exist at the end;

- `List mergeSortedLists(List l1, List l2)`, which takes two sorted lists as input and returns the sorted union of the two lists;

- `void Maxsort(List l)`