Problem 21

C++

ListNode\* mergeKlists(vector<ListNode\*> lists){

    auto comp = [](ListNode \*a, ListNode \*b){ return a -> val > b -> val;};

    priority\_queue<ListNode\*, vector<ListNode\*>, comp> kHeap(comp);

    for(ListNode \*node: lists){

      if(node)

kHeap.push(node);

    }

    ListNode \*dummy = new ListNode(0);

    ListNode \*prev = dummy;

    while(!kHeap.empty()){

          ListNode\* node = kHeap.top();

          kHeap.pop();

          prev -> node;

          if(node->next)

              kHeap.push();

    }

    return dummy -> next;

}