```
struct Node {
  int val
  Node* next;
};

Node* Merge(Node* in1, Node* in2)
  {
    if (in1 == nullptr) {
       return in2
     }
    esle if (in2 == nullptr) {
          return in1
     }
    else {
      in1->next = Merge(in2, in1->next);
        return in1
```

a)

Inputs

in1 = 1, 2, 3, 4,

in2 = 5, 6

Calls In1, In2

In->next = (5,6), (2,3,4)); return In1; : In->next = 5

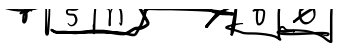
In->next (2,3,4) (6)); return In1; : In->next = 2

In->next (3,4) return In1; : In->next = 6

In->next (4), ∅) return In1 : (3,4)

a) 1, 5, 2, 6, 3, 4

In2 is ∅ in this call, so returns In1 : (3, 4, ∅).



b) n1 = nullptr
n2 = 2

b=2. ; returns and no recursion is performed