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

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

1 → next = 5

5 → next = 2

2 → next = 6

6 → next = 3

3 → next = 4

a) in1 = 1, 2, 3, 4 in2 = 5, 6 → 1-5-2-6-3-4

main

llrec(1, 5) = 1

1->next = llrec(5, 2) = 5

return 1

5->next = llrec(2, 6) = 2

return 5

2->next = llrec(6, 3) = 6

return 2

6->next = llrec(3, nullptr) = 3

return 6

return 3

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

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

b) in1 = nullptr, in2 = 2

llrec(nullptr, 2)

return 2