

Linked List Example

struct node {

int data;

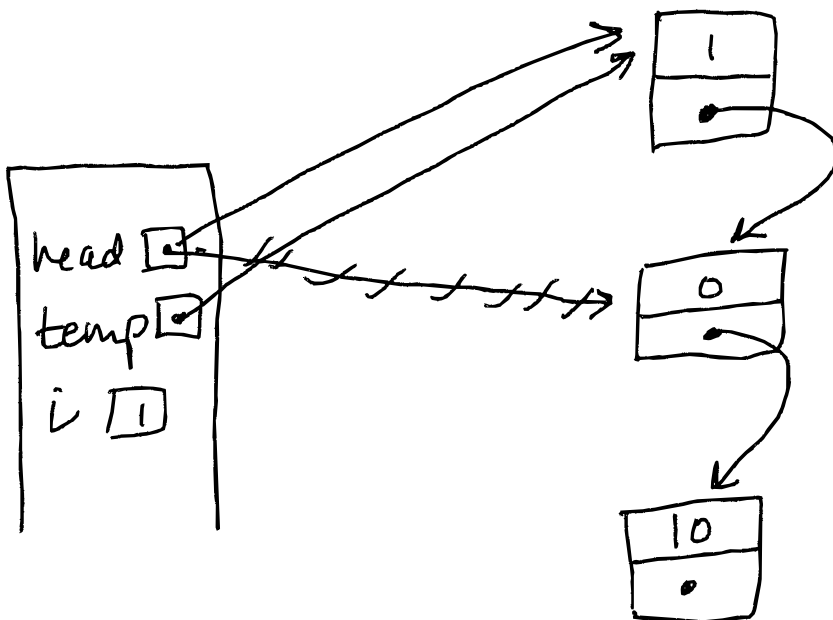
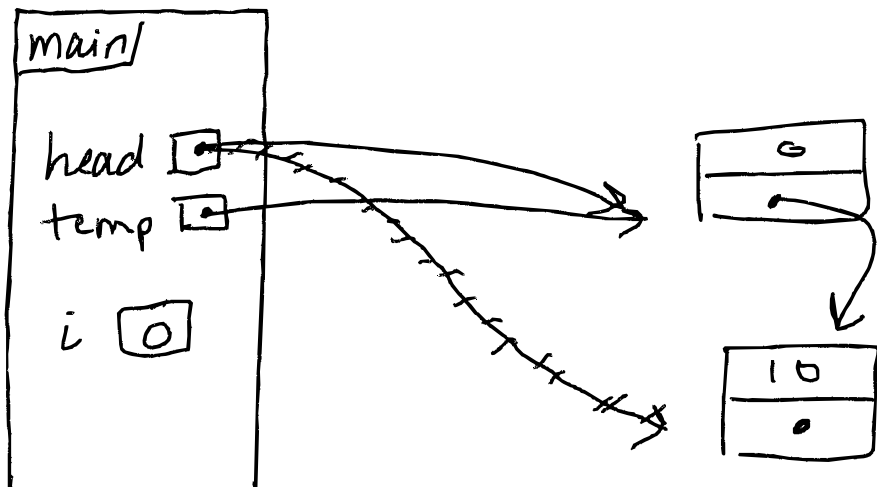
struct node* next;

}

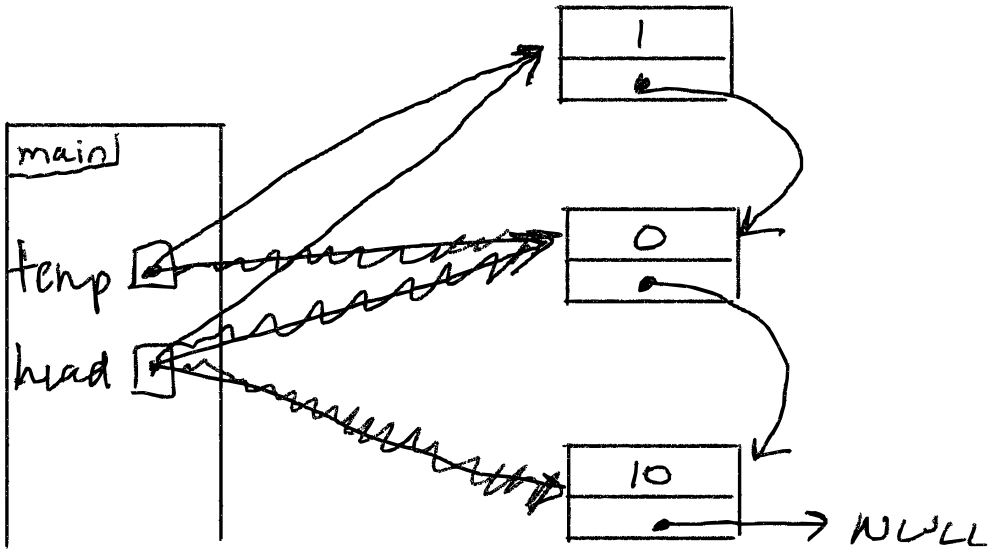
size

4 bytes (int)

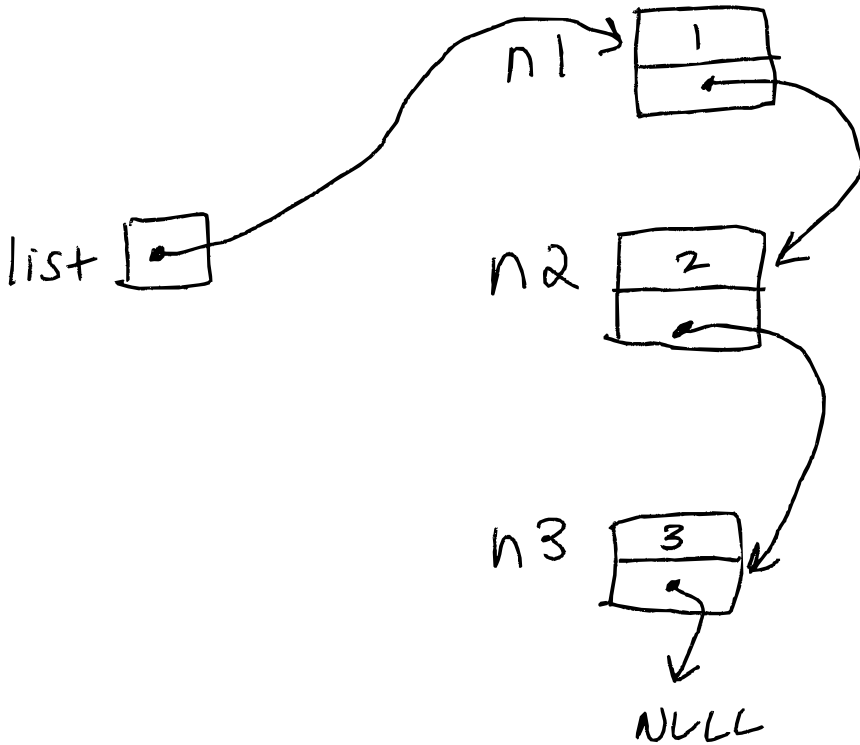
8 bytes (ptr)



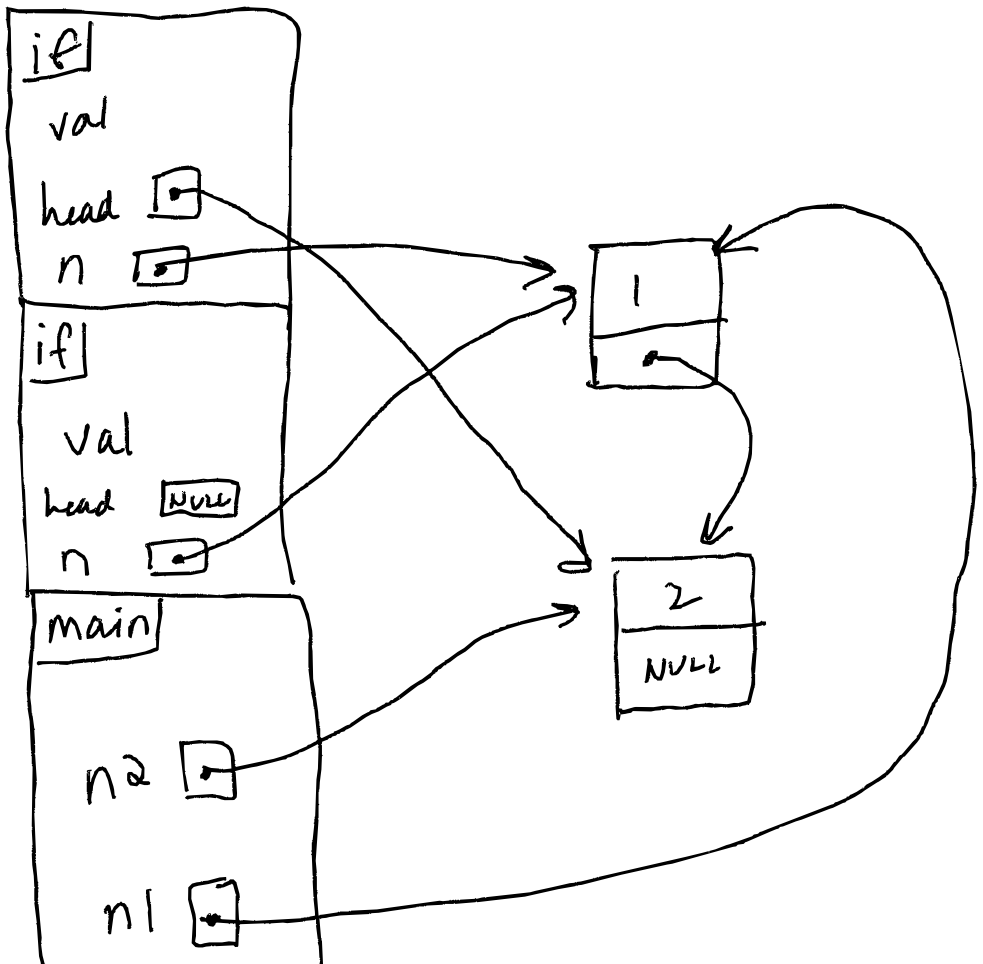
Linked List Ex



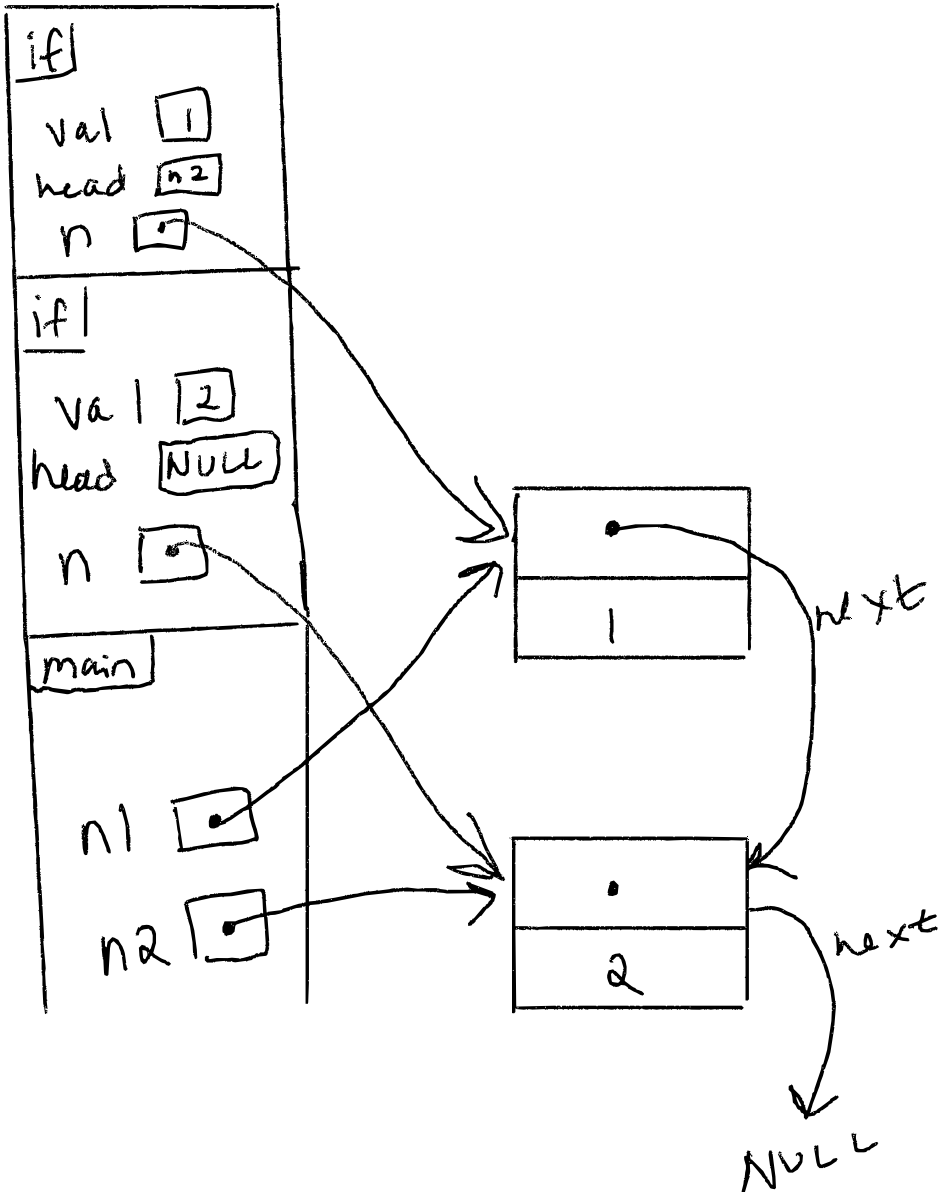
Visualize the LL from this code



Visualize insert-front

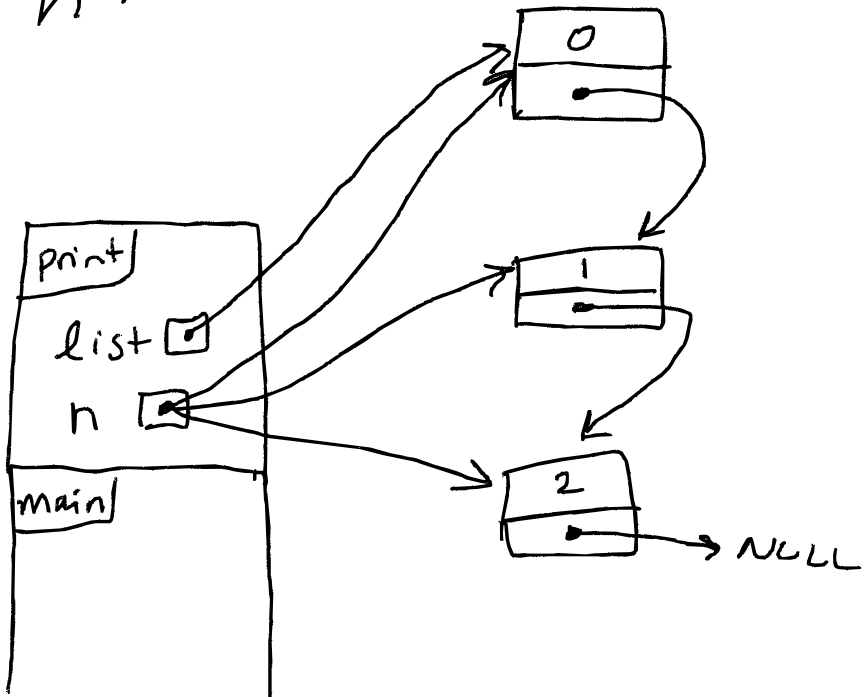


Visualize Insert Front

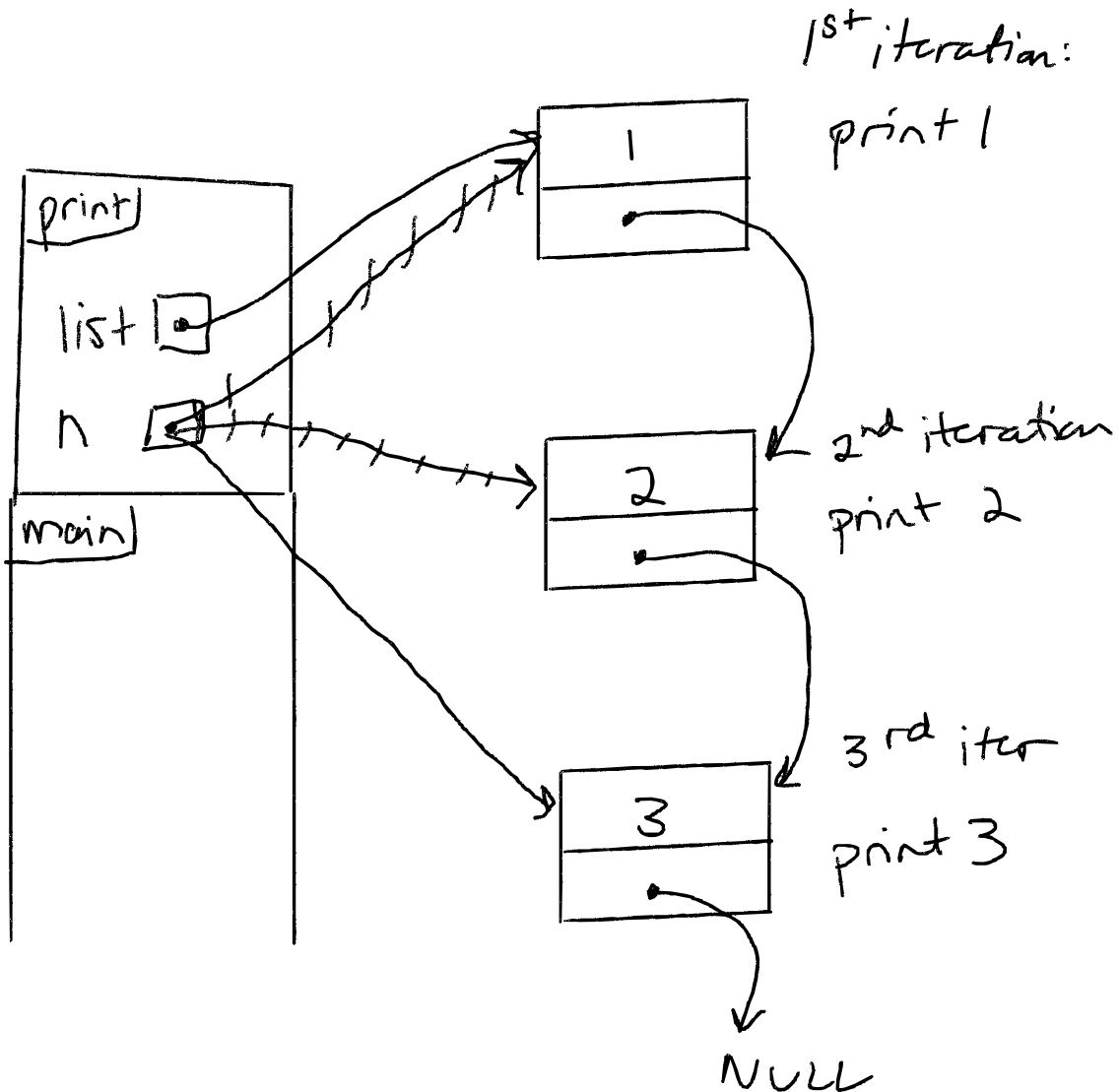


Visualize Print

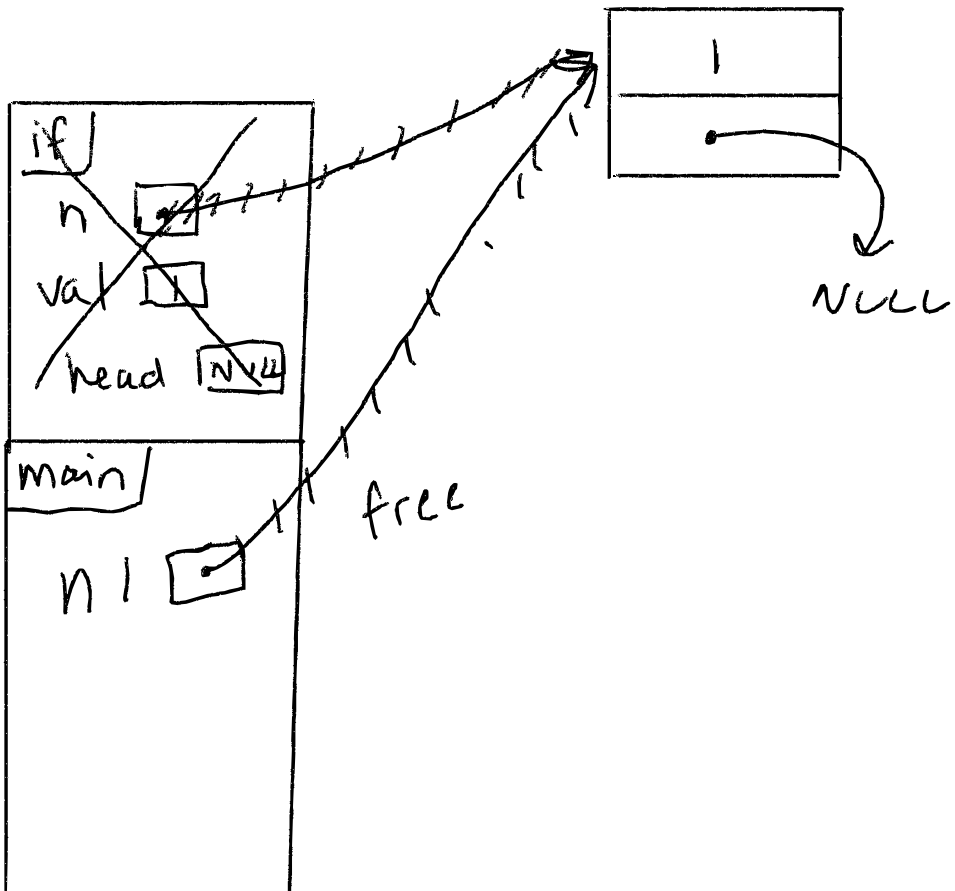
why create
n?



Visualize Print

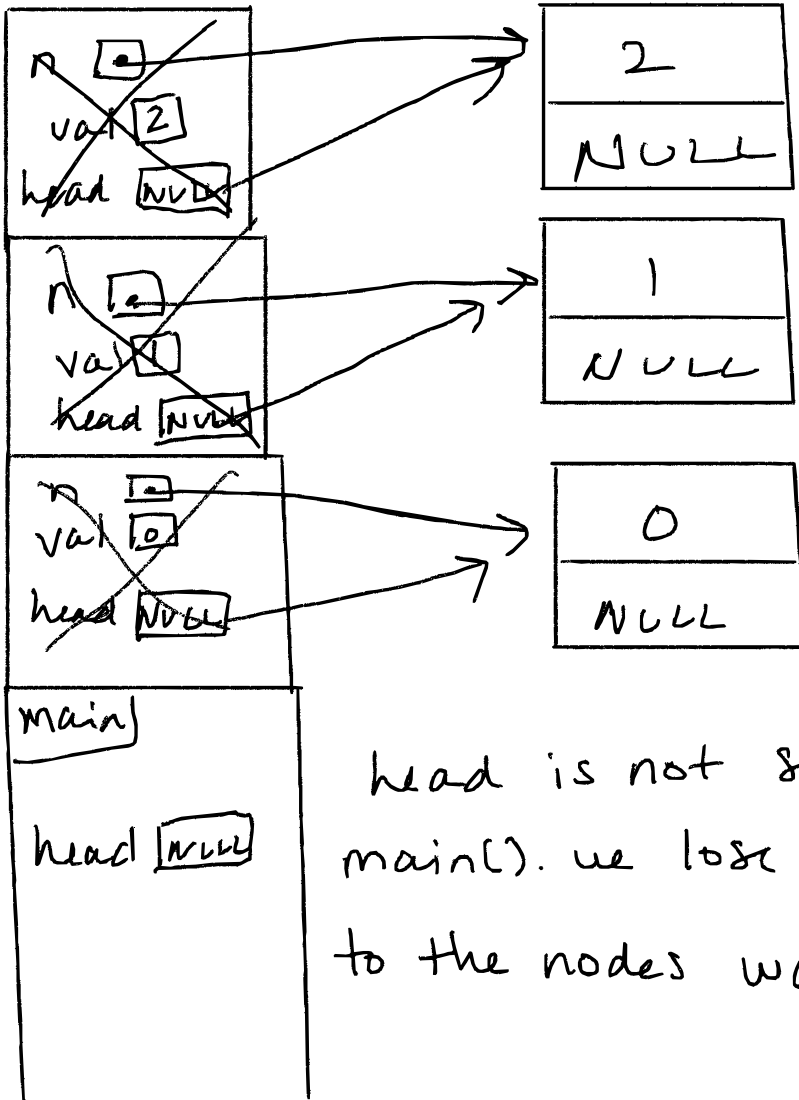


Exercise: Draw the stack diagram



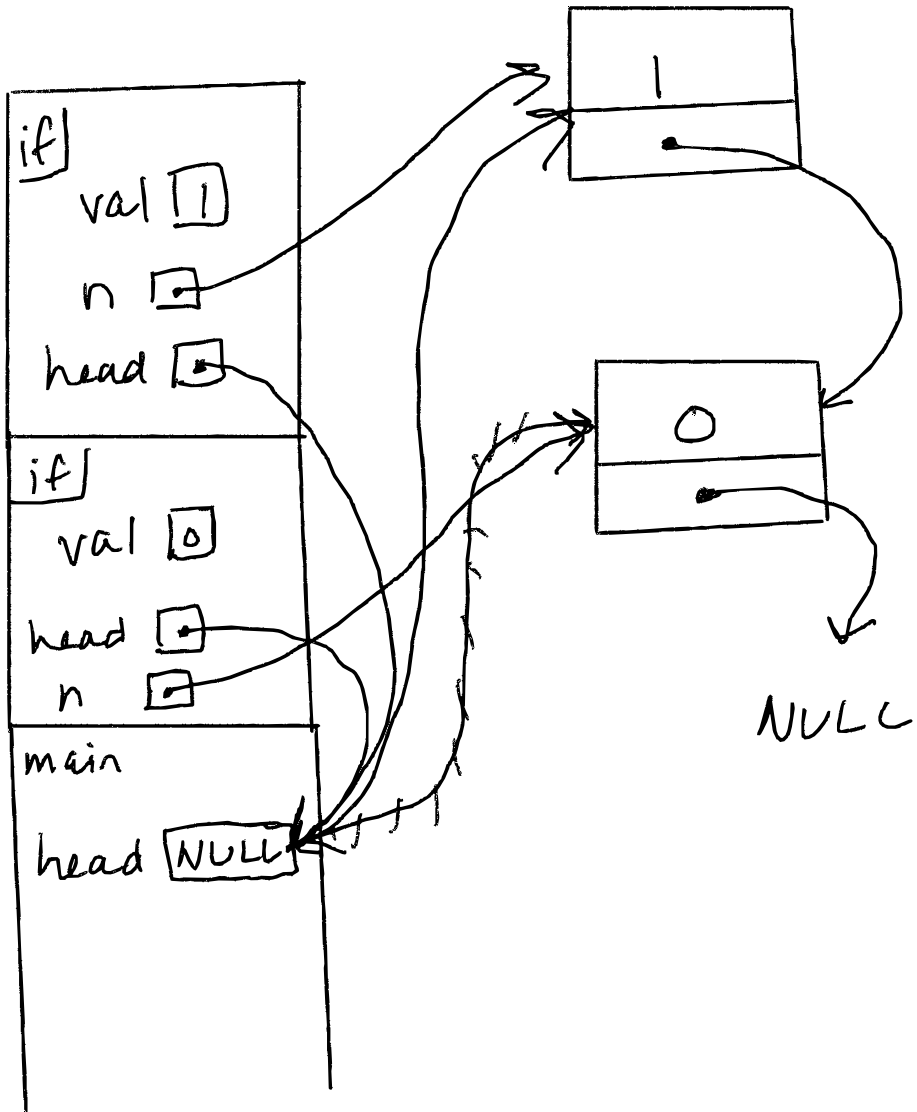
Dynamic LL V2

This doesn't work. why?



Dynamic LL v2 (fixed)

$n \rightarrow \text{next} = \text{head} \rightarrow \text{ptr?}$



Binary Tree

```
struct node {
```

```
    int val;
```

```
    struct node* parent;
```

```
    struct node* left;
```

```
    struct node* right;
```

```
}
```

Binary Tree

Functions:

- struct node* add(struct node* root, int val);
 ↑
 returns new root
- void clear(struct node* root);
- struct node* remove(struct node* root, int val)
- void print(struct node* root);
- struct node* find(struct node* root, int val)

process of removing node
code & draw it at