Lists

Sunday, June 3, 2018 3:42 PM

node

mem address

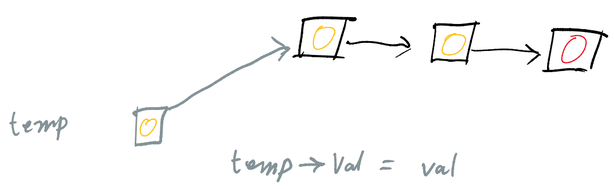
Null

functions

```
int length(struct node *)
    do{
        current = current -> Next;
        i++;
    }while(current != NULL)
    return i++;
```

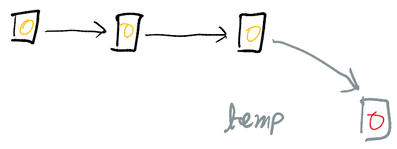
```
void print(struct node *)
    do{
        cout << current -> Value << " " << '\n';
        current = current -> Next;
    }while(current != NULL)
```

```
struct node* push(struct node* Head, int val)
```




```
temp -> Val = val
temp -> Next = Head
return temp
```

```
struct node* append(struct node* Head, int val)
```




```
Current = Head;
temp -> Val = val
do{
    current = current -> Next
}while(Current -> Next = NULL)
Current -> Next = temp
temp -> Next = NULL
Return Head;
```

```
struct node* clear(struct node* Head)
    Current = Head
    While(current != NULL){
        next = current -> Next
        free(current)
        current = next
    }
    Head = Null
    return Head
```

```
struct note * remove_node(struct node * Head, int i)
    temp = Head
    i--;
    int j = 0
    while(j < i)
        temp = temp -> next
        i++
    next = temp
    temp = temp -> next
    if(temp -> next == NULL)
        free(temp)
        next -> next = NULL
        temp = NULL
        return Head;
    else
        next -> next = temp -> next
        free(temp)
        temp = NULL
        return Head;
```

use Bubble sort for Sort_ascending & Sort_descending

insert_middle uses same logic as remove_node