

Lab 3

Starting with the code in `~l1iang/cs260/labs/lab3` write code to manage a linked list using recursive approach.

Here is some sample code about recursion on linked list:

```
class LinkedList
{
public:
    void print() const;
    void append(int data);
private:
    void print(Node * first) const;
    //pay attention to the passing by reference part below!
    void append(Node*& first, int data);
    Node * head;
}

void LinkedList::print() const
{
    //invoke recursive private member function
    print(head);
}

void LinkedList::print(Node * first) const
{
    if(first)
    {
        cout << first->data << endl;
        //recursive call to print the rest of the list
        print(first->next);
    }
}
```

```

}

void LinkedList::append(Node *& first, int data)
{
    if(!first)//the end of the list
    {
        first = new Node(data);
    }
    else
    {
        //recursive call to append to the smaller list
        append(first->next, data);
    }
}

```

You can build the app using the `make` command, which is supported by the file named `makefile` that's provided in the directory.

For lab3 submission, copy the member function **`bool LinkedList::del(char)`** implementation into `lab3.txt`, then append the output of the app to the file. ftp `lab3.txt` to your local machine and upload it to the Desire2Learn dropbox.

`./app >> lab3.txt`