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IF-48-11

List.h

```
list.h x list.cpp x
#ifndef LIST_H_INCLUDED
#define LIST_H_INCLUDED

#include <iostream>

using namespace std;

typedef int infotype;
typedef struct elmlist *address;

struct elmlist {
    infotype info;
    address next;
};

struct list {
    address first;
};

void createList(list &L);
address allocate(infotype x);
void insertFirst(list &L, address p);
void printInfo(list L);

#endif // LIST_H_INCLUDED
```

List.cpp

```
x list.h x list.cpp x
#include <iostream>
#include "list.h"

using namespace std;

void createList(list &L) {
    L.first = nullptr;
}

address allocate(intotype x) {
    address p = new elmlist;

    p->info = x;
    p->next = nullptr;

    return p;
}

void insertFirst(list &L, address p) {
    p->next = L.first;
    L.first = p;
}

void printInfo(list L) {
    address p = L.first;

    while (p) {
        cout << p->info << ", ";
        p = p->next;
    }
    cout << endl;
}
```

Main.cpp

```
main.cpp
#include "list.h"
#include <iostream>
using namespace std;

int main() {
    list L;
    createList(L);

    int x;
    address p;

    // Input angka pertama
    cout << "Masukkan angka pertama: ";
    cin >> x;
    p = allocate(x);
    insertFirst(L, p);
    printInfo(L);

    cout << "Masukkan angka kedua: ";
    cin >> x;
    p = allocate(x);
    insertFirst(L, p);
    printInfo(L);

    cout << "Masukkan angka ketiga: ";
    cin >> x;
    p = allocate(x);
    insertFirst(L, p);
    printInfo(L);

    cout << endl;
    return 0;
}
```

```
C:\Users\USER\Documents\C- X + v
Masukkan angka pertama: 1
1,
Masukkan angka kedua: 5
5, 1,
Masukkan angka ketiga: 3
3, 5, 1,

Process returned 0 (0x0)   execution time : 5.202 s
Press any key to continue.
|
```