

```

#ifndef ADT_H
#define ADT_H

#include <iostream>
#define first(L) L.first
#define next(P) P->next
#define info(P) P->info

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 // ADT_H

```

```

#include "adt.h"
#include <iostream>

using namespace std;

| void createList(List &L){
|     first(L) = NULL;
| }

| address allocate(infotype x){
|     address P = new elmlist;
|     info(P) = x;
|     next(P) = NULL;
|
|     return P;
| }

| void insertFirst(List &L, address P){
|     next(P) = first(L);
|     first(L) = P;
| }

| void printInfo(List L){
|     address p = first(L);
|     while (p != NULL) {
|         cout << p->info << ", ";
|         p = p->next;
|     }
|     cout << endl;
| }

```

```

#include "adt.h"
#include <iostream>

using namespace std;

int main() {
    List L;
    createList(L);
    int a, b, c;

    cout << "Masukan digit NIM pertama: ";
    cin >> a;
    address NIM1 = allocate(a);
    insertFirst(L, NIM1);

    cout << "Masukan digit NIM Kedua: ";
    cin >> b;
    address NIM2 = allocate(b);
    insertFirst(L, NIM2);

    cout << "Masukan digit NIM ketiga: ";
    cin >> c;
    address NIM3 = allocate(c);
    insertFirst(L, NIM3);

    printInfo(L);

    return 0;
}

```

```

Masukan digit NIM pertama: 2
Masukan digit NIM Kedua: 4
Masukan digit NIM ketiga: 3
3, 4, 2,

Process returned 0 (0x0)   execution time : 2.204 s
Press any key to continue.

```