



```
list.cpp
1 #include "list.h"
2 using namespace std;
3
4 void createList(List &L)
5 {
6     first(L) = NULL;
7 }
8
9 address allocate(infotype x)
10 {
11     address P = new elmList;
12     info(P) = x;
13     next(P) = NULL;
14     return P;
15 }
16
17 void insertFirst(List &L, address P)
18 {
19     next(P) = first(L);
20     first(L) = P;
21 }
22
23 void printInfo(List L)
24 {
25     address P = first(L);
26     while(P != NULL)
27     {
28         cout<<info(P)<<" ";
29         P = next(P);
30     }
31     cout<<endl;
32 }
33
34 void deleteFirst(List &L, address &P)
35 {
36     if(first(L) != NULL){
37         P = first(L);
38         first(L) = next(P);
39         next(P) = NULL;
40     }
41 }
```

```
main.cpp
1 #include "list.h"
2 using namespace std;
3
4 int main()
5 {
6     infotype x, i,
7     address P;
8     List (L);
9     i = 0;
10    a = 1;
11    b = 1;
12    c = 1;
13    cout<<"Masukan Banyak data: ";
14    cin>>data;
15    createList(L);
16    while(i<data){
17        cout<<"Data ke-"<<a++<<" ";
18        cin>>x;
19        P = allocate(x);
20        insertFirst(L, P);
21        i++;
22    }
23    if(b == 1){
24        cout<<"Sebelum memakai delete first:\n";
25        printInfo (L);
26    }
27    if(c == 1){
28        deleteFirst(L, P);
29        cout<<"Sesudah memakai delete first:\n";
30        printInfo (L);
31    }
32    return 0;
33 }
34 }
```

"D:\Fahmi\File Kuliah\Tingkat satu\Struktur Dat...

```
Masukan Banyak data: 3
Data ke-1: 3
Data ke-2: 2
Data ke-3: 1
Sebelum memakai delete first:
1, 2, 3,
Sesudah memakai delete first:
2, 3,
Process returned 0 (0x0)   execution time : 9.261 s
Press any key to continue.
```

```
/*
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*/
#ifndef LIST_H_INCLUDED
#define LIST_H_INCLUDED

#include <iostream>
#define Nil NULL
#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);
void deleteFirst(List &L, address &P);
#endif // LIST_H_INCLUDED
```