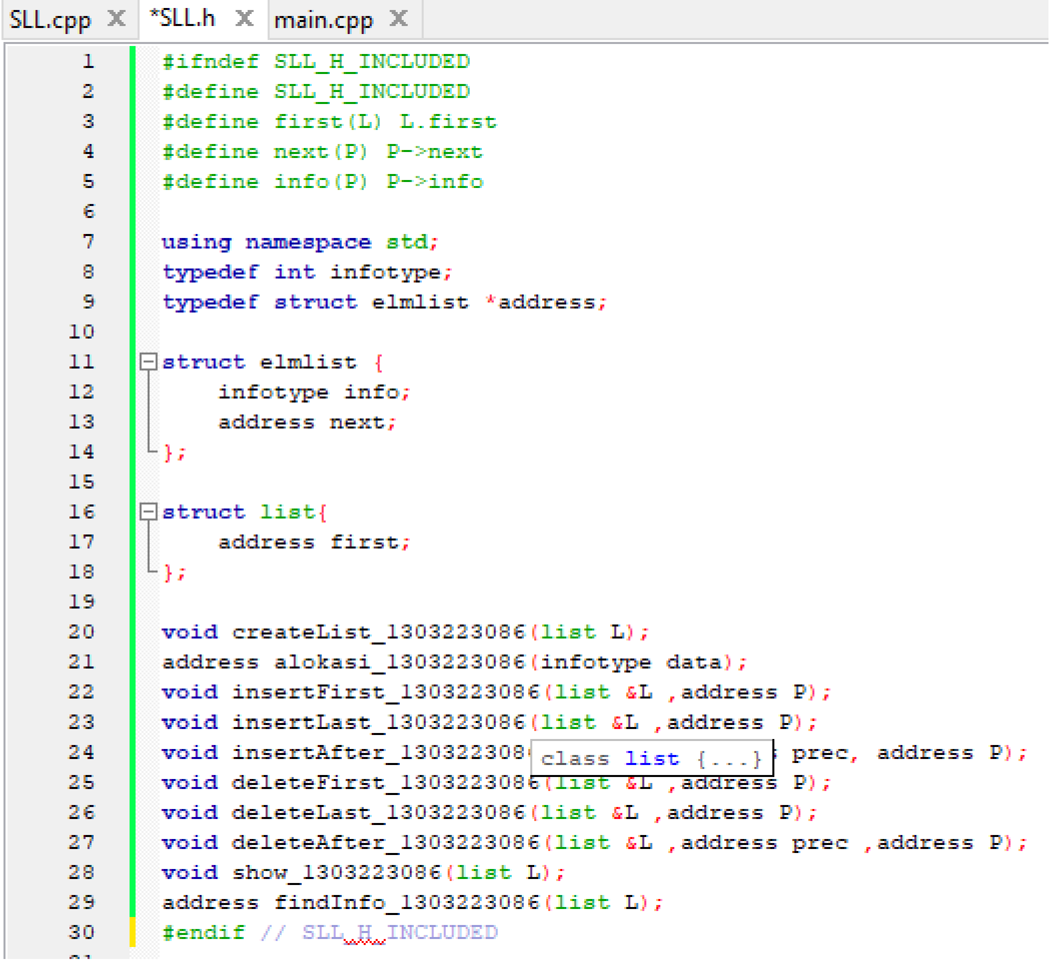
Nadhif Ahmad M.Z
1303223086
IT_46-02
NDE

SLL.cpp

```
#include <iostream>
#include "SLL.h"

void createList_1303223086(list L){
   first(L) = NULL;
}

address alokasi_1303223086(infotype data){
   address P = new elmlist;
   info(P) = data;
   next(P) = NULL;
   return P;
}
void insertFirst_1303223086(list &L ,address P){
   next(P) = first(L);
   first(L) = P;
}


void insertLast_1303223086(list &L ,address P){
   if (first(L) == NULL){
      first(L) = P;
   } else{
      address Q = first(L);
      while (next(Q) !=NULL) {
         Q = next(Q);
      }
      next(Q) = P;
   }
}

void insertAfter_1303223086(list &L ,address prec, address P){
   next(P) = next(prec);
   next(prec) = P;
}

void deleteFirst_1303223086(list L ,address P){
    P = first(L);
    first(L) = next(P);
    next(P) = NULL;
}
void deleteLast_1303223086(list &L ,address P){
    if(first(L) == NULL){
        cout << "List Kosong";

    } else if(next(first(L))== NULL){
        P = first(L);
        first(L) = NULL;
    }else{
        address Q = first(L);
        while(next(next(Q)) != NULL){
            Q = next(Q);
        }
        P = next(Q);
        next(Q) = NULL;
    }
}
void deleteAfter_1303223086(list &L ,address prec ,address P){
    P = next(prec);
    next(prec) = next(P);
    next(P) = NULL;
}
void show_1303223086(list L){
    address P = first(L);
    while(P != NULL){
        cout << info(P) << ", "
        P = next(P);
    }
    cout << endl;
}
address findInfo_1303223086(list L){
    infotype data;
    cin >> data;
    address P = first(L);
    while(P != NULL){
        if (info(P) == data){
            return(P);
        }
        P = next(P);
    }
    return NULL
```

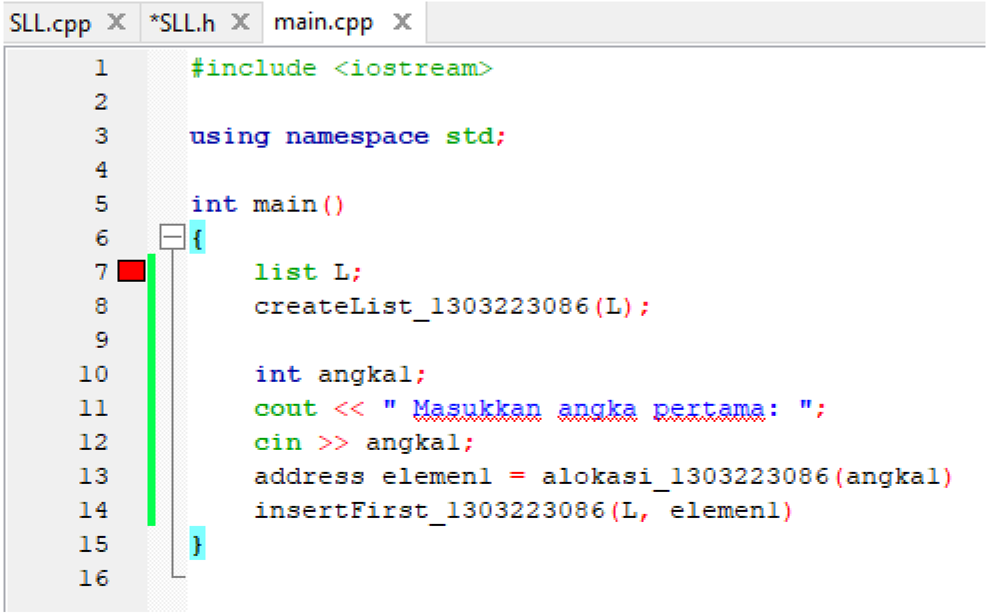
}

- SLL.h



```
#ifndef SLL_H_INCLUDED
#define SLL_H_INCLUDED
#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_1303223086(list L);
address alokasi_1303223086(infotype data);
void insertFirst_1303223086(list &L ,address P);
void insertLast_1303223086(list &L ,address P);
void insertAfter_130322308 prec, address P);
void deleteFirst_1303223086(list &L ,address P);
void deleteLast_1303223086(list &L ,address P);
void deleteAfter_1303223086(list &L ,address prec ,address P);
void show_1303223086(list L);
address findInfo_1303223086(list L);
#endif // SLL_H_INCLUDED
```

main.cpp



```
#include <iostream>

using namespace std;

int main()
{
    list L;
    createList_1303223086(L);

    int angka1;
    cout << " Masukkan angka pertama: ";
    cin >> angka1;
    address elemen1 = alokasi_1303223086(angka1)
    insertFirst_1303223086(L, elemen1)
}

```