

Derv.c

```
#include "header.h"

void inserth(int x){
    Node* temp=(Node*)malloc(sizeof(Node));
    //temp->data=x;
    //temp->next=head;
    (*temp).data=x;
    (*temp).next=head;
    head=temp;
}

void inserte(int x){
    Node* temp, *r;
    if(head==NULL){
        temp=(Node*)malloc(sizeof(Node));
        temp->data=x;
        temp->next=NULL;
        head=temp;
    }
    else{
        temp=head;
        while(temp->next!=NULL)
            temp=temp->next;

        r=(Node*)malloc(sizeof(Node));
        r->data=x;
        r->next=NULL;
        temp->next=r;
    }
}

void del(int x){
    Node * old, *temp;
    temp=head;
    printf("delete %d\n", x);
    while(temp!=NULL){
        if(temp->data==x){
            //first node
            if(temp==head)
                head=temp->next;
            //intermediate nodes
            else
                old->next=temp->next;

            free(temp);
            return;
        }
        else
            old=temp;
    }
}
```

```
        temp=temp->next;
    }
    printf("%d not found\n\n", x);
}
```

```
void print(){
    Node* temp=head;
    printf("List of number : ");

    while(temp!=NULL){
        printf(" %d", temp->data);
        temp= temp->next;
    }
    printf("\n\n");
}
```

Main.c

```
#include "header.h"
int main()
{
```

```
    head=NULL;
    //int n,i,x;
    inserth(10);
    print();
    inserte(12);
    print();
    inserth(9);
    print();
    inserte(100);
    print();
    del(10);
    print();
    inserte(1000); print();
    inserth(1);print();
    del(12); print();
```

```
    return 0;
}
```

Header.c

```
#ifndef HEADER_H_INCLUDED
#define HEADER_H_INCLUDED

#include <stdio.h>
#include <stdlib.h>

struct node{
    int data;
    struct node* next;
};

typedef struct node Node;
Node* head;

void inserth(int x);
void inserte(int x);
void del(int x);
void print();

#endif // HEADER_H_INCLUDED
```