#include <stdio.h>

#include <stdlib.h>

#define TRUE 1

#define FALSE 0

struct node

{

int data;

struct node \*next;

};

typedef struct node node;

node \*top;

void initialize()

{

top = NULL;

}

void push(int value)

{

node \*tmp;

tmp = malloc(sizeof(node));

tmp -> data = value;

tmp -> next = top;

top = tmp;

}

int pop()

{

node \*tmp;

int n;

tmp = top;

n = tmp->data;

top = top->next;

free(tmp);

return n;

}

int Top()

{

return top->data;

}

int isempty()

{

return top==NULL;

}

void display(node \*head)

{

if(head == NULL)

{

printf("NULL\n");

}

else

{

printf("%d\n", head -> data);

display(head->next);

}

}

int main()

{

initialize();

push(10);

push(20);

push(30);

push(40);

push(50);

push(60);

push(70);

push(80);

push(90);

push(100);

printf("The top is %d\n",Top());

pop();

printf("The top after pop is %d\n",Top());

display(top);

return 0;

}