

```

//Implement a stack using an array.
#include <stdio.h>
#define MAX 50
#define INF -100000

struct stack
{
    int array[50];
    int top;
    int size;
};

void push(struct stack &s)
{
    if(s.top != s.size)
    {
        int temp;
        printf("Enter the input : ");
        scanf("%d", &temp);
        s.array[++s.top] = temp;
    }
    else
    {
        printf("Stack Overflow\n");
    }
}

int pop(struct stack &s)
{
    if(s.top != -1)
    {
        int temp = s.array[s.top--];
        return temp;
    }
    else
    {
        printf("Stack Underflow\n");
        return INF;
    }
}

void display(struct stack &s)
{
    if(s.top != -1)
    {
        for(int i=s.top ; i>=0 ; i--)
        {
            printf("%d->", s.array[i]);
        }
        printf("\n");
    }
}

int main()
{
    struct stack s;
    s.top = -1;
    s.size = MAX;
    push(s);
    push(s);
    push(s);
    push(s);
    display(s);
    printf("After removing 1 element from stack\n");
    int c = pop(s);
    display(s);
}

```

/*OUTPUT

```
Enter the input : 1
Enter the input : 2
Enter the input : 3
Enter the input : 4
4->3->2->1->
After removing 1 element from stack
3->2->1->
*/
```