



```
#include <stdio.h>
#define MAX 100
int stack[MAX], i;
static int top = -1;
void add(int);
void pop();
void display();

int main() {
    int choice, element;
    while(1) {
        printf("Enter the choice : \n");
        printf(" 1. Add \n 2. Remove \n 3. Display \n 4. Exit \n");
        scanf("%d",&choice);
        switch(choice) {
            case 1:
                printf("Enter the element to be added: \n");
                scanf("%d",&element);
                add(element);
                break;
            case 2:
                pop();
                break;
            case 3:
                display();
                break;
            case 4:
                printf("Exiting Program....\n");
                return 0;
            default:
                printf("Invalid Input....Try Again!!!\n");
        }
    }
}

void add(int n) {
    if(top==MAX-1) {
```

```
printf("The Stack is full!");
return;
}
top++;
stack[top] = n;
printf("%d has been added to the stack!\n",n);
}

void pop() {
if(top== -1) {
printf("Stack has no elements to remove!\n");
}
int rmEle = stack[top];
top--;
printf("%d is removed from the stack!\n",rmEle);
}

void display() {
if(top== -1) {
printf("Stack has no elements to display!\n");
}
else{
printf("The Stack Elements are: ");
for (i=top;i>=0;i--) {
printf(" %d ",stack[i]);
}
printf("\n");
}
}
```