C stack.c > main()

```c
#include<stdio.h>
#include<stdlib.h>
#define size 5
int stack[size];
int top=-1;
void push();
void pop();
void display();
void push()
{
    int x;
    if(top==size-1)
    printf("stack overflow");
    else{
        printf("enter number to be inserted");
        scanf("%d",&x);
        top=top+1;
        stack[top]=x;
        printf("element inserted successfully");

    }
}
void pop()
{
    if(top==-1)

        printf("stack underflow");
        else{
            printf("element deleted is %d",stack[top]);
            top--;

        }

}
```

```c
void display()
{
    if(top==-1)
    printf("stack underflow");
    else{
        printf("elements in the stack are ");
        for(int i=top;i>=0;i--)
        printf("%d",stack[i]);
    }
}
void main()
{
    int choice;
    while(1)
    {
        printf("\n\n\n1.push\n2.pop\n3.display\n4.end\n");
        printf("enter your choice");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:push();
            break;
            case 2:
            pop();
            break;
            case 3:
            display();
            break;
            case 4:
            exit(0);
            default:printf("invalid choice");
```

```
    switch(choice)
    {
        case 1:push();
        break;
        case 2:
        pop();
        break;
        case 3:
        display();
        break;
        case 4:
        exit(0);
        default:printf("invalid choice");
    }
}
```

```
1.push
2.pop
3.display
4.end
enter your choice1
enter number to be inserted3
element inserted successfully


1.push
2.pop
3.display
4.end
enter your choice1
enter number to be inserted5
element inserted successfully


1.push
2.pop
3.display
4.end
enter your choice1
enter number to be inserted8
element inserted successfully


1.push
2.pop
3.display
4.end
enter your choice1
enter number to be inserted7
element inserted successfully


1.push
2.pop
3.display
4.end
enter your choice1
enter number to be inserted9
element inserted successfully


1.push
2.pop
3.display
4.end
enter your choice1
stack overflow
```

```
1.push
2.pop
3.display
4.end
enter your choice3
elements in the stack are 97853


1.push
2.pop
3.display
4.end
enter your choice2
element deleted is 9


1.push
2.pop
3.display
4.end
enter your choice2
element deleted is 7


1.push
2.pop
3.display
4.end
enter your choice2
element deleted is 8


1.push
2.pop
3.display
4.end
enter your choice2
element deleted is 5


1.push
2.pop
3.display
4.end
enter your choice2
element deleted is 3


1.push
2.pop
3.display
4.end
enter your choice2
stack underflow
```

```
1.push
2.pop
3.display
4.end
enter your choice3
stack underflow


1.push
2.pop
3.display
4.end
enter your choice6
invalid choice


1.push
2.pop
3.display
4.end
enter your choice4
PS C:\Users\Admin\Desktop\rashi>
```