```
#include<stdio.h>

#include<stdlib.h>

#define Size 4

int Top=-1, inp_array[Size];
void Push();
void Pop();
void show();

int main()
{
	int choice;

	while(1)
	{
		printf("\nOperations performed by Stack");
		printf("\n1.Push the element\n2.Pop the element\n3.Show\n4.End");
		printf("\n\nEnter the choice:");
		scanf("%d",&choice);

		switch(choice)
		{
			case 1: Push();
				break;
			case 2: Pop();
				break;
			case 3: show();
				break;
			case 4: exit(0);
```

```
                default: printf("\nInvalid choice!!");
            }
        }
}

void Push()
{
        int x;

        if(Top==Size-1)
        {
            printf("\nOverflow!!");
        }
        else
        {
            printf("\nEnter element to be inserted to the stack:");
            scanf("%d",&x);
            Top=Top+1;
            inp_array[Top]=x;
        }
}

void Pop()
{
        if(Top==-1)
        {
            printf("\nUnderflow!!");
        }
        else
        {
```

```
                printf("\nPopped element:  %d",inp_array[Top]);
                Top=Top-1;
        }
}

void show()
{


        if(Top==-1)
        {
                printf("\nUnderflow!!");
        }
        else
        {
                printf("\nElements present in the stack: \n");
                for(int i=Top;i>=0;--i)
                        printf("%d\n",inp_array[i]);
        }
}
```

```
Operations performed by Stack
1.Push the element
2.Pop the element
3.Show
4.End

Enter the choice:2

Underflow!!
Operations performed by Stack
1.Push the element
2.Pop the element
3.Show
4.End

Enter the choice:4

--------------------------------
Process exited after 17.51 seconds with return value 0
Press any key to continue . . .
```