

```
#include <stdio.h>

#include <stdlib.h>

#define n 5

int stack[n];

int top=-1;

void push();

void pop();

void display();


void push()
{
    if(top>=n)
    {
        printf("Stack overflow\n");
    }
    else
    {
        int x;

        printf("Enter element:\n");

        scanf("%d",&x);

        top++;

        stack[top]=x;
    }
}

void pop()
{
    if(top== -1)
    {
        printf("Stack underflow\n");
    }
    else{
```

```

        int ele;

        printf("Enter element\n");

        scanf("%d",&ele);

        printf("Element deleted is %d\n",ele);

        top--;

    }

}

void display()
{
    if(top== -1){

        printf("Empty stack\n");

    }

    else{

        printf("Elements in the stack are:\n");

        for(int i=top;i>=0;i--)

        {

            printf("%d\n",stack[i]);

        }

        printf("Shreyash Sinha : 1BM22CS273 \n");

        exit(0);

    }

}

void main()
{

    while(1)

    {

        int choice;

        printf("Enter 1 for push,2 for pop,3 for display");

        scanf("%d",&choice);

        switch(choice){

            case 1:

```

```

        push();
        break;
    case 2:
        pop();
        break;
    case 3:
        display();
        break;
    default:
        printf("Invalid input");}
}
}

```

```

Enter 1 for push,2 for pop,3 for display2
Stack underflow
}}

```

```

Enter 1 for push,2 for pop,3 for display1
Enter element:10
Enter 1 for push,2 for pop,3 for display1
Enter element:5
Enter 1 for push,2 for pop,3 for display1
Enter element:23
Enter 1 for push,2 for pop,3 for display2
Enter element5
Element deleted is 5Enter 1 for push,2 for pop,3 for display3
Elements in the stack are:5
10
Shreyash Sinha 1BM22CS273

```