

```
#include <stdio.h>
```

```
int stack[50];
```

```
int p=-1;
```

```
void push(int data)
```

```
{
```

```
    if (p==49)
```

```
        printf("Stack Overflow \n");
```

```
    else{
```

```
        p+=1;
```

```
        stack[p]=data;
```

```
    }
```

```
}
```

```
void pop(){
```

```
    if (p== -1)
```

```
        printf("Stack Underflow \n");
```

```
    else {
```

```
        printf("Element deleted: %d \n", stack[p]);
```

```
        p-=1;
```

```
    }
```

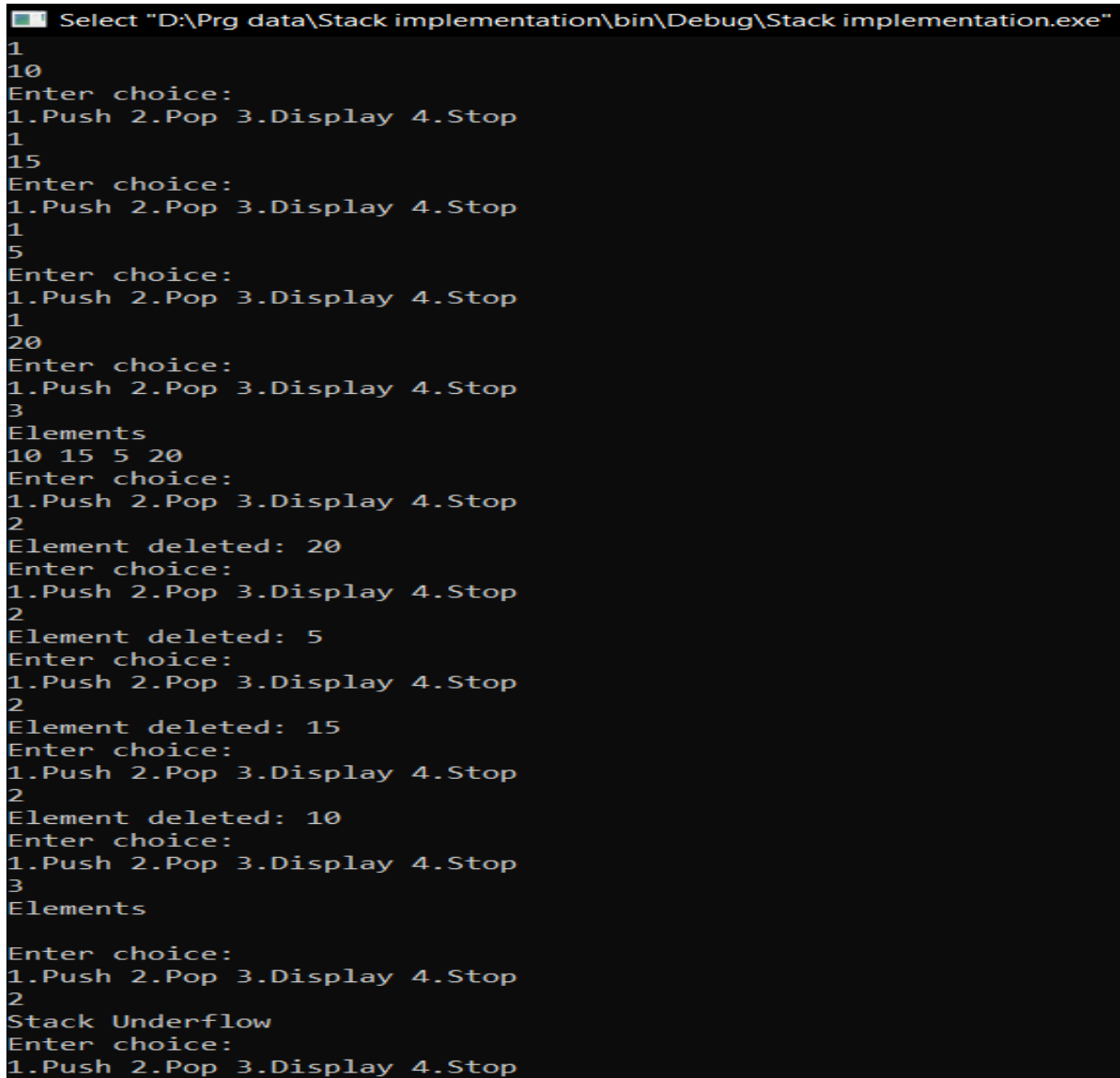
```
}
```

```
void display(){
```

```
printf("Elements \n");  
for (int i=0;i<=p;i++)  
    printf("%d ",stack[i]);  
}  
  
int main(){  
    int n,x;  
    for (int i=0;i==0;){  
        printf("Enter choice:\n1.Push 2.Pop 3.Display 4.Stop\n");  
        scanf("%d",&n);  
        switch (n){  
            case 1:  
                scanf("%d",&x);  
                push(x);  
                break;  
            case 2:  
                pop();  
                break;  
            case 3:  
                display();  
                break;  
            case 4:  
                exit(0);  
                break;  
            default:  
                printf("Wrong Choice\n");
```

```
        break;
    }
}

return 0;
}
```



```
Select "D:\Prg data\Stack implementation\bin\Debug\Stack implementation.exe"
1
10
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
1
15
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
1
5
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
1
20
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
3
Elements
10 15 5 20
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
2
Element deleted: 20
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
2
Element deleted: 5
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
2
Element deleted: 15
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
2
Element deleted: 10
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
3
Elements

Enter choice:
1.Push 2.Pop 3.Display 4.Stop
2
Stack Underflow
Enter choice:
1.Push 2.Pop 3.Display 4.Stop
```