Stack Program Code:

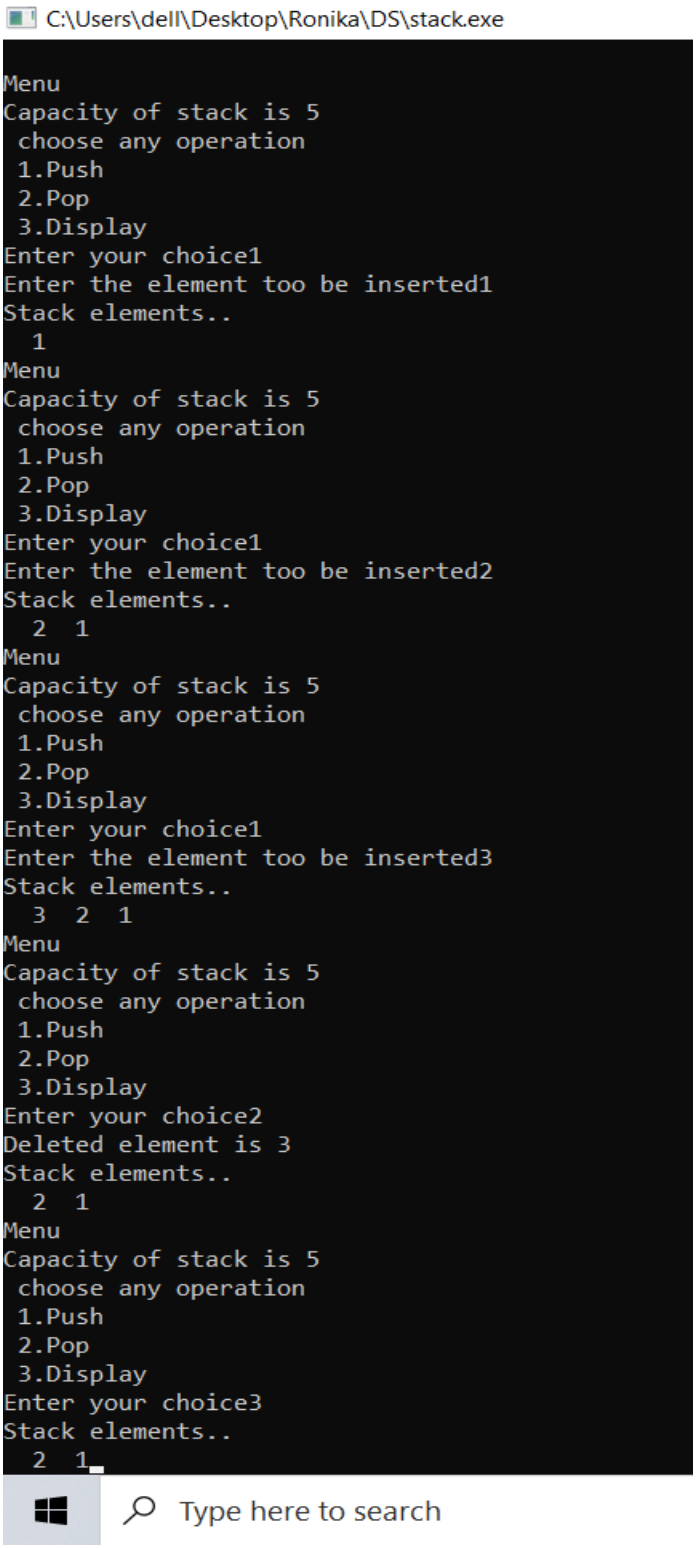
```
#include<stdio.h>
#include<conio.h>
#define max 5
int stack[max],top=-1;
void display()
{
    int p=top;
    if(p==-1)
        printf("Stack is empty\n");
    else
    {
        printf("Stack elements..\n");
        while(p>=0)
        {
            printf("%3d",stack[p]);
            p--;
        }
   }
}
void main()
{
    int ch,n;
```

```
    while(1)
    {


    printf("\nMenu\n");
    printf("Capacity of stack is %d",max);
    printf("\n choose any operation\n 1.Push\n 2.Pop\n
3.Display\n");
    printf("Enter your choice");
    scanf("%d",&ch);
    switch(ch){
        case 1:if(top==max-1)
                {
                  printf("\nStack is full\n");
                    getch();
                }
               else{
                    printf("Enter the element too be inserted");
                    scanf("%d",&n);
                    stack[++top]=n;
                    display();
                 }
              break;
        case 2:if(top<0)
                {
                  printf("Stack is empty\n");
```

```
                getch();
               }
              else{
                    n=stack[top--];;
                    printf("Deleted element is %d\n",n);
                    getch();
                    display();
                 }
              break;
        case 3:display();
               getch();
               break;
         case 4:exit(0);
       }
   }
}
```

Output:


C:\Users\dell\Desktop\Ronika\DS\stack.exe
Menu
Capacity of stack is 5
choose any operation
1.Push
2.Pop
3.Display
Enter your choice1
Enter the element too be inserted1
Stack elements..
1
Menu
Capacity of stack is 5
choose any operation
1.Push
2.Pop
3.Display
Enter your choice1
Enter the element too be inserted2
Stack elements..
2 1
Menu
Capacity of stack is 5
choose any operation
1.Push
2.Pop
3.Display
Enter your choice1
Enter the element too be inserted3
Stack elements..
3 2 1
Menu
Capacity of stack is 5
choose any operation
1.Push
2.Pop
3.Display
Enter your choice2
Deleted element is 3
Stack elements..
2 1
Menu
Capacity of stack is 5
choose any operation
1.Push
2.Pop
3.Display
Enter your choice3
Stack elements..
2 1
Type here to search