

The popped element is 1
Enter the Choice:2

UNDERFLOW
Enter the Choice:1
Enter a value to be pushed:1

Enter the Choice:1
Enter a value to be pushed:2

Enter the Choice:1
Enter a value to be pushed:3

Enter the Choice:1
Enter a value to be pushed:4

Enter the Choice:3

The elements in stack are as follows:

4, 3, 2, 1,

Press Next Choice
Enter the Choice:2

The popped element is 4
Enter the Choice:2

The popped element is 3
Enter the Choice:2

The popped element is 2
Enter the Choice:2

The popped element is 1
Enter the Choice:2

UNDERFLOW
Enter the Choice:3

The stack is empty
Enter the Choice:

Enter the size of stack:4

select ur choice:

- 1.Push
- 2.Pop
- 3.display
- 4.exit

Enter the Choice:1

Enter a value to be pushed:1

Enter the Choice:1

Enter a value to be pushed:2

Enter the Choice:1

Enter a value to be pushed:3

Enter the Choice:1

Enter a value to be pushed:4

Enter the Choice:1

STACK OVERFLOW

Enter the Choice:2

The popped element is 4

Enter the Choice:2

The popped element is 3

Enter the Choice:2

The popped element is 2

Enter the Choice:2

The popped element is 1

Enter the Choice:2

UNDERFLOW

Enter the Choice:1

Enter a value to be pushed:1

Enter the Choice:1

Enter a value to be pushed:2

Enter the Choice:1

Enter a value to be pushed:3

```
{
    printf("\nSTACK OVERFLOW");
}
else
{
    printf(" Enter a value to be pushed:");
    scanf("%d",&no);
    top++;
    stack[top]=no;
}
}

void pop()
{
    if(top<=-1)
    {
        printf("\n UNDERFLOW");
    }
    else
    {
        printf("\n The popped element is %d",stack[top]);
        top--;
    }
}

void display()
{
    if(top>=0)
    {
        printf("\n The elements in stack are as follows: \n");
        for(i=top;i>=0;i--)
            printf("\t%d,",stack[i]);
        printf("\n Press Next Choice");
    }
    else
    {
        printf("\n The stack is empty");
    }
}
```



```
    {  
        printf ("\nINVALID CHOICE!");  
    }  
}  
  
return 0;
```

```
void push()
```

```
{  
    if(top>=n-1)  
    {  
        printf ("\nSTACK OVERFLOW");  
    }  
    else  
    {  
        printf(" Enter a value to be pushed:");  
        scanf ("%d",&no);  
        top++;  
        stack[top]=no;  
    }  
}
```

```
void pop()
```

```
{  
    if(top<=-1)  
    {  
        printf ("\n UNDERFLOW");  
    }  
    else  
    {  
        printf ("\n The popped element is %d",stack[top]);  
        top--;  
    }  
}
```

```
void display()
```

```
{  
    if(top>=0)  
    {  
        printf ("\n The elements in stack are as follows: \n")
```



```

#include<stdio.h>
#include<stdlib.h>
int stack[5];
void push(void);
void pop(void);
void display(void);
int n,top,no,i,ch;
int main()
{
    top=-1;
    printf("\n Enter the size of stack:");
    scanf("%d",&n);
    printf("\n select ur choice:");
    printf("\n 1.Push\n 2.Pop\n 3.display\n 4.exit");
    while(ch!='0')
    {
        printf("\n Enter the Choice:");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:
                push();
                break;
            case 2:
                pop();
                break;
            case 3:
                display();
                break;
            case 4:
                exit(0);
                break;
            default:
            {
                printf ("\nINVALID CHOICE!");
            }
        }
    }
    return 0;
}

```