

libate Name:- Tasmiya Fathima
 USN:- 1BM19CS172

Write a program to simulate the working of stack using an array with the following:

- a) Push
- b) Pop
- c) Display

The program should print appropriate messages for stack overflow, stack underflow.

```
top = -1;
st[10];
```

```
void push()
```

```
{
```

```
    if (top == Stack-size - 1)
```

```
    {
```

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

```
    }
```

```
    else
```

```
        printf("\n Enter element to be entered  

        in stack :");
```

```
        top = top + 1;
```

```
        st[top] = item;
```

```
    }
```

```
*void pop()
```

```
{
```

```
    if (top == -1)
```

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

```
    else
```

```
        printf("\n The value deleted from  

        stack is: %d", st[top]);
```

M T W T F S S
□ □ □ □ □ □ □

COMPASS

Date: _____

```
    top = top - 1;  
}
```

```
void display ()  
{
```

```
    if (top == -1)  
        printf ("Stack is empty\n");
```

```
    else
```

```
        printf ("\n Contents of the stack are: \n");
```

```
        for (i = top; i >= 0; --i)  
            printf ("%d \n", st[i]);
```

```
    }
```