```c
#include <stdio.h>
#include <stdlib.h>
#include <conio.h>
#define MAX 3
int st[MAX], top=-1;
void push(int st[], int val);
int pop(int st[]);
int peek(int st[]);
void display(int st[]);
int main(int argc, char *argv[])
{
    int val, option;
    do
    {
        printf("\n ***STACK OPERATIONS***");
        printf("\n 1. PUSH");
        printf("\n 2. POP");
        printf("\n 3. PEEK");
        printf("\n 4. DISPLAY");
        printf("\n 5. EXIT");
        printf("\n Enter your option: ");
        scanf("%d", &option);
        switch(option)
        {
            case 1:
            printf("\n Enter the number to be pushed on stack: ");
            scanf("%d", &val);
            push(st, val);
            break;
            case 2:
            val = pop(st);
            if(val != -1)
            printf("\n The value deleted from stack is: %d", val);
            break;
            case 3:
            val = peek(st);
            if(val != -1)
            printf("\n The value stored at top of stack is: %d", val);
            break;
            case 4:
            display(st);
            break;
        }
    }
        while(option != 5);
        return 0;
    }
    void push(int st[], int val)
    {
        if(top == MAX-1)
        {
        printf("\n STACK OVERFLOW");
        }
        else
        {
        top++;
        st[top] = val;
        }
    }
    int pop(int st[])
{
```

```
int val;
if(top == -1)
   {
       printf("\n STACK UNDERFLOW");
       return -1;
   }
else
    {
       val = st[top];
       top--;
       return val;
    }
}
void display(int st[])
{
int i;
if(top == -1)
{
printf("\n STACK IS EMPTY");
}
else
   {
        for(i=top;i>=0;i--)
        printf("\n %d",st[i]);
        printf("\n");
   }
}
int peek(int st[])
{
if(top == -1)
{
printf("\n STACK IS EMPTY");
return -1;
}
else
return (st[top]);
}
```