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#include <stdio.h>
#define size 3
int top=-1;
void push(int [], int);
int pop(int[]);
void display(int []);
int main(int argc, char **argv)
{
    int stack[size];
    int choice ,element;
    char ch;
    do
    {
        printf("Enter your choice\n");
        printf("1. Push\n");
        printf("2. Pop\n");
        printf("3. Display\n");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1: printf("Enter the element to be pushed
\n");

                scanf("%d",&element);
                push(stack ,element);
                break;
            case 2: element=pop(stack);
                if(element==-1)
                    printf("Stack Underflow");
                else
                    printf("Popped element is %d
\n",element);
                break;
            case 3: display(stack);
                break;
            default: printf("Invalid choice");
        }
        printf("Do you want to continue:\n");
        fflush(stdin);
        scanf("%c",&ch);
    } while(ch=='y' || ch=='Y');
    return 0;
}

void push(int stack[], int ele)
{

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    if (top==size-1)
    {
        printf("Stack overflow");
    }
    else
    {
        top++;
        stack[top]=ele;
    }
}

int pop(int stack[])
{
    int popele;
    if(top==-1)

        return -1;

    else
    {
        popele=stack[top];
        top--;
        return (popele);
    }

}

void display(int stack[])
{
    int i;
    printf("The stack elements\n");
    for(i=top ;i>=0;i--)
    {

        printf("%d\t",stack[i]);
    }
}

```