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#include<stdlib.h>
#include<stdio.h>
#include<string.h>
#define max_size 5
int stack[max_size],top=-1,flag=1;
int i,temp,item,rev[max_size],num[max_size];
void push();
void pop();
void display();
int main()
{
int choice;
printf("\n\n-----STACK OPERATIONS ----- ");
printf("1.Push\n");
printf("2.Pop\n");
printf("3.Display\n");
printf("4.Exit\n");
printf(" ");
while(1)
{
printf("\nEnter your choice:\t");
scanf("%d",&choice);
switch(choice)
{
case 1: push();break;
case 2: pop();
if(flag)
printf("\nThe popped element: %d\t",item);
temp=top; break;
case 3: display(); break;
case 4: exit(0); break;
default: printf("\nInvalid choice:\n"); break;
}
}
//return 0;
}
void push() //Inserting element into the stack
{
if(top==(max_size-1))
{
printf("\nStack Overflow:");
}
else
{
printf("Enter the element to be inserted:\t");

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scanf("%d",&item);
top=top+1;
stack[top]=item;
}
temp=top;
}
void pop() //deleting an element from the stack
{
if(top== -1)
{
printf("Stack Underflow:");
flag=0;
}
else
{
item=stack[top];
top=top-1;
}
}
void display()
{
int i; top=temp;
if(top== -1)
{
printf("\nStack is Empty:");
}
else
{
printf("\nThe stack elements are:\n" );
for(i=top;i>=0;i--)
{
printf("%d\n",stack[i]);
}
}
}
```