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Lab 2 - Stack Implementation

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```
#include<stdio.h>
#include<conio.h>
#define MAX 2
int stack[MAX], top=-1;
void push();
int pop();
void display();
void main()
{
 int x,choice;
 clrscr();
while(1)
{
printf("\n1: Push \n2 Pop3: Display\n 4: Exit");
printf("Enter your choice");
scanf("%d", &choice);
switch(choice)
{
case 1: push();
      break;
case 2: x=pop();
if [x!=-1)
printf("\n Popper element is %d",x);
   break;
case 3: display();
   break;
case 4: getch();
  exit(0);
  break;

default: printf("\n Invalid choice");
```

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```
    }
  }
}

void push( )
{
 int item;
 if (top == MAX-1)
 {
  Printf("\n Stack Overflow");
 return;
}
else
{
flag = 1;
Printf("\n Enter the value to be pushed:");
Scanf("%d", &item);
top++;
stack[top]=item;
}
}

int pop( )
{
int item;
if (top==-1)
{
 Printf("\n Stack Underflow");
return(-1);
}
else
{
item=stack[top];
```

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```
    top--;
    return(item);
    }
}

void display()
{
int i;
if (top==-1)
 {
 printf("\n Stack is empty");
 return;
}
else
 {
   for(i=top; i>=0; i--)
   printf("\n%d", stack[i]);
}
}
```