

# STACK PROGRAM

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#include <stdio.h>

#define SIZE 10

void push(int);
void pop();
void display();
void operation();

int stack[SIZE],top=-1;

int main()
{
    printf("*****operation*****\n1.push \n2.pop \n3.display \n4.exit");
    operation();
    return 0;}

void operation()
{
    int choice=0,value;
    while(choice<=4)
    {
        printf("\nenter your choice :");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:
                printf("enter a number to be inserted:");
                scanf("%d",&value);
                push(value);
                break;
            case 2:
                pop();
```

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        break;
    case 3:
        display();
        break;
    case 4:
        exit(0);
    default:
        printf("\nWrong selection!!!Try again !!!");
        operation();

    }
}
}

void push(int value)
{
    if(top==SIZE-1)
        printf("stack is overflow");
    else
    {
        top++;
        stack[top]=value;
        printf("insertion is successfully completed");
    }
}

void pop()
{
    if(top==-1)
        printf("stack is underflow");
    else
    {

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        printf("deleted element is %d",stack[top]);
        top--;
    }
}
void display()
{
    int i;
    printf("Elements in stack are \n");
    for(i=0;i<=top;i++)
    {

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

    }
}
```