**Min Stack**

#include <bits/stdc++.h>

// Implement class for minStack.

class minStack

{

// Write your code here.

stack<int> st;

int minValue;

void getMin(stack<int> &st,int& minimum){

if(st.empty()){

return;

}

int val = st.top();

st.pop();

if(val < minimum){

minimum = val;

}

getMin(st,minimum);

st.push(val);

return;

}

public:

// Constructor

minStack()

{

// Write your code here.

minValue = 100000;

}

void push(int num)

{

// Write your code here.

if(st.empty()){

minValue = num;

st.push(num);

return;

}

if(num<minValue){

minValue = num;

}

st.push(num);

return;

}

int pop()

{

// Write your code here.

if(st.empty()){

return -1;

}

int element = st.top();

st.pop();

if(element == minValue){

int mini = 100001;

getMin(st,mini);

minValue = mini;

return element;

}else{

return element;

}

}

int top()

{

// Write your code here.

if(st.empty()){

return -1;

}

return st.top();

}

int getMin()

{

// Write your code here.

if(st.empty()){

return -1;

}

return minValue;

}

};