Get min at pop

You are given an array **A** of size **N**. You need to first push the elements of the array into a stack and then print minimum in the stack at each pop.

Expected Time Complexity: O(N).
Expected Auxiliary Space: O(N).

ALGORITHM :

1. Create two stacks , one to keep track of all the elements , s1 , and the other as a supporting stack to keep minimum elements.
2. While pushing the elements in the stack s1 , if the supporting stack is empty , then push the element in the supporting stack .
3. Else if the top of the supporting stack is greater than the incoming element then push the element in the supporting stack
4. While popping , if the popped element is equal to the top of the supporting stack , then pop it from the supporting stack also.
5. The top of the supporting stack is the minimum element.

CODE :

```
Stack <int > s;
Stack <int> ss;

//push function
void push (int a)
{
s.push(a);

if(ss.size()==0 || ss.top()> =a)
{
        ss.push(a);
}
return;
```

```
}

//pop function
int pop()
{
if(s.size()==0)
        return -1;
int ans=s.top();
        s.pop();
if(ss.top()==ans){
        ss.pop();
}
return  ans;

}

// getmin function

int getmin()
{
if(ss.size()==0)
{
return  -1;
}
return ss.top();
}
```