#include<bits/stdc++.h>

using namespace std;

vector<long> stock\_span(vector<long> &arr){

long n = arr.size();

vector<long> res;

stack<long> st;

st.push(0);

res.push\_back(1);

for(long i=1;i<n;i++){

while(st.size()!=0 && arr[i]>arr[st.top()]){

st.pop();

}

if(st.size()==0){

res.push\_back(i+1);

}

else{

res.push\_back(i-st.top());

}

st.push(i);

}

return res;

}

int main(){

long n;

cin>>n;

vector<long> arr(n);

for(long i=0;i<n;i++){

cin>>arr[i];

}

vector<long> res = stock\_span(arr);

for(auto x: res){

cout<<x<<endl;

}

}