Question 1: Leader in the Array

#include <iostream>

using namespace std;

int main()

{

int n;

cin>>n;

int arr[n];

for(int i=0;i<n;i++)

{

cin>>arr[i];

}

int curr\_max = arr[n-1];

cout<<arr[n-1]<<" ";

for(int i=n-1;i>0;i--)

{

if(arr[i]>curr\_max)

{

curr\_max=arr[i];

cout<<curr\_max<<" ";

}

}

}

// In order to print in the same given sequence we can use a vector and push all the elements in it. And print reverse of it.

Question 2: Best Time to Buy and Sell Stock

#include <iostream>

using namespace std;

int profit(int arr[] , int n) {

int maxRight = arr[n-1];

int maxProfit = 0;

for(int i=n-2 ; i>=0 ; i--)

{

maxRight = max (maxRight , arr[i]);

maxProfit = max (maxProfit , maxRight - arr[i]);

}

return maxProfit;

}

int main()

{

int n,res=0;

cin>>n;

int arr[n];

for(int i=0;i<n;i++)

{

cin>>arr[i];

}

res = profit(arr,n);

cout<<res; }

Question 3: Sum of All Subset XOR Totals

#include <iostream>

using namespace std;

int subsetSum(int arr[] , int n) {

int res= 0;

for (int i = 0; i < (1 << n); i++) {

int sum = 0;

for (int j = 0; j < n; j++) {

if ((i & (1 << j)) > 0) {

sum = sum ^ arr[j];

}

}

res += sum;

}

return res;

}

int main()

{

int n,res=0;

cin>>n;

int arr[n];

for(int i=0;i<n;i++)

{

cin>>arr[i];

}

res = subsetSum(arr,n);

cout<<res;

}