**Que 1 - Leaders in the Array**

**import java.util.\*;**

**class Main {**

**static void printLeaders(int arr[], int size)**

**{ // create stack to store leaders\*/**

**Stack<Integer> stack = new Stack<Integer>();**

**stack.push(arr[size - 1]);**

**for (int i = size - 2; i >= 0; i--) {**

**if (arr[i] > stack.peek()) {**

**stack.push(arr[i]);**

**}**

**}**

**//print stack elements**

**// run loop till stack is not empty**

**while (!stack.empty()) {**

**System.out.print(stack.pop() + " ");**

**}**

**}**

**public static void main(String[] args)**

**{**

**Scanner s = new Scanner(System.in);**

**int n = s.nextInt();**

**int arr[] = new int[n];**

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

**arr[i]= s.nextInt();**

**}**

**printLeaders(arr, n);**

**}**

**}**

**Que 2 - Best time to Buy and Sell Stocks**

**import java.util.\*;**

**public class Main**

**{**

**static int profit(int [] p){**

**int min = Integer.MAX\_VALUE;**

**int max = 0;**

**for(int i=0 ; i < p.length; i++){**

**if(p[i] < min){**

**min = p[i];**

**}**

**else if( p[i] - min > max){**

**max = p[i] - min;**

**}**

**} return max;**

**}**

**public static void main(String[] args) {**

**Scanner s = new Scanner(System.in);**

**int n = s.nextInt();**

**int arr[] = new int[n];**

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

**arr[i]= s.nextInt();**

**} //Function call**

**int ans= profit(arr);**

**System.out.println(ans);**

**}**

**}**

**Que 3 – Sum of All Subset XOR Totals**

**import java.util.\*;**

**class Main {**

**static int rec(int i, int x, int arr[], int size)**

**{**

**if (i == size)**

**return x;**

**// first choice can be to include the i-th element**

**// in the subset and thus we take its xor**

**int choice1 = rec(i + 1, x ^ arr[i], arr, size);**

**// second choice can be to include the i-th element**

**// in the subset and thus we take its xor**

**int choice2 = rec(i + 1, x, arr, size);**

**// return sum of both the choices as we need to find**

**// the sum of xor of all subsets**

**return choice1 + choice2;**

**}**

**// Returns sum of XORs of all subsets**

**static int xorSum(int arr[], int size)**

**{**

**return rec(0, 0, arr, size);**

**}**

**public static void main(String[] args)**

**{**

**Scanner s = new Scanner(System.in);**

**int n = s.nextInt();**

**int arr[] = new int[n];**

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

**arr[i]= s.nextInt();**

**}**

**//Function call**

**System.out.println(xorSum(arr, n));**

**}**

**}**