import java.io.\*;

import java.util.\*;

class Array {

// Driver code

public static void main (String[] args) throws IOException{

// Taking input using buffered reader

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

int testcases = Integer.parseInt(br.readLine());

// looping through all testcases

while(testcases-- > 0){

int sizeOfArray = Integer.parseInt(br.readLine());

int arr [] = new int[sizeOfArray];

String line = br.readLine();

String[] elements = line.trim().split("\\s+");

for(int i = 0;i<sizeOfArray;i++){

arr[i] = Integer.parseInt(elements[i]);

}

Complete obj = new Complete();

arr = obj.game\_with\_number(arr, sizeOfArray);

for(int i=0; i< sizeOfArray;i++){

System.out.print(arr[i] + " ");

}

System.out.println();

}

}

}

// } Driver Code Ends

//User function Template for Java

class Complete{

// Function for finding maximum and value pair

public static int[] game\_with\_number (int arr[], int n) {

// Complete the function

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

arr[i] = arr[i]^arr[i+1];

}

return arr;

}

}