

/*Day 87 coding Statement :

There are N stones in a pond, each having a value A_i written on it.

Frog is at stone 1 and wants to reach stone N. The frog can jump from a stone i to any stone j ($j > i$).

Let d be the length of subarray (i.e. $j - i + 1$), then the energy required for the jump is $(d \cdot A_i) - A_j$.

Find the minimum non-negative amount of energy required by the frog to reach the N-th stone.

Note: It is possible that the total amount of energy required is negative, in that case, you should print the minimum non-negative value (i.e. 0).*/

```
import java.util.*;
import java.lang.*;
import java.io.*;
class Main
{
    public static void main (String[] args) throws java.lang.Exception
    {
        BufferedReader bu=new BufferedReader(new InputStreamReader(System.in));
        StringBuilder sb=new StringBuilder();
        int t=Integer.parseInt(bu.readLine());
        while(t-->0)
        {
            int n=Integer.parseInt(bu.readLine());
            String s[]=bu.readLine().split(" ");
            int a[]=new int[n];
            for(i=0;i<n;i++) a[i]=Integer.parseInt(s[i]);
            long ans=a[0]; int min=a[0];
            for(i=1;i<n;i++)
            {
                ans+=min;
                min=Math.min(min,a[i]);
            }
            ans-=a[n-1];
            ans=Math.max(ans,0);
            sb.append(ans+"\n");
        }
        System.out.print(sb);
    }
}
```