**Note:**  
This is the same problem as in **SPOJ – HISTOGRA – Largest Rectangle in a Histogram**. But here the most important point to be noted that **in SPOJ**, the **Time Limit is 0.409 sec** where **in Light OJ** , the same problem has **Time limit of 2 sec**…. So here **in Light OJ**, the problem can be solved by **Segment tree** ( the way in which I had done above in **Solution 1**) with**O(nlogn)** time complexity. But there in SPOJ, the **Segment tree solution** will get **TLE** since the **O(nlogn)** complexity will cross the Time limit of 0.409 sec. So here, I have approached in **stack solution** which is of **O(n)**  **time complexity.**