**CSES Problem Set Range Queries**

**Question Analysis**

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| **Si. No.** | **Problem Title** | **Main Task** | **Do we Update?** | **Do we search?** | **Do we delete?** | **Comments** |
|  | Static Range Sum Queries | Sum in the given range | No | No | No | Array is static |
|  | Static Range Minimum Queries | Minimum value in the range | No | No | No | Array is static |
|  | Dynamic Range Sum Queries | Sum of values in given range | Yes | No | No | Array is dynamic and updated for update queries |
|  | Dynamic Range Minimum Queries | Minimum value in a range | Yes | No | No | Array is dynamic and updated for update queries |
|  | Range Xor Queries | XOR sum of values in range | No | No | No | No update |
|  | Range Update Queries | Update range of values, get item as position | Yes | No | No | Update is allowed |
|  | Forest Queries | Count trees in a given range | No | Yes | No | Grid remains static |
|  | Hotel Queries | Find available rooms for each weight | Yes | Yes | No | Room availability changes dynamically |
|  | List Removals | Remove elements from the list | No | No | Yes | Elements are deleted from the list |
|  | Salary Queries | Give number of employees in a salary range and update salary of a given employee | Yes | Yes | No |  |
|  | Prefix Sum Queries | update the value at position k to u and maximum prefix sum in range [a,b] | Yes | No | No |  |
|  | Pizzeria Queries | Find closest pizza place | Yes | Yes | No |  |
|  | Subarray Sum Queries | Sum of subarrays | No | Yes | No |  |
|  | Distinct Values Queries | Count distinct values in a range | No | No | No |  |
|  | Increasing Array Queries | minimum number of operations after which the subarray is increased | No | No | No |  |
|  | Forest Queries II | Change the state (empty/tree) of a square and give how many trees are inside a rectangle in the forest | Yes | Yes | No |  |
|  | Range Updates and Sums | Increase each value in range [a,b] by x.  Set each value in range [a,b] to x.  Calculate the sum of values in range [a,b] | Yes | No | No |  |
|  | Polynomial Queries | Increase the first value in range [a,b] by 1, the second value by 2, the third value by 3, and so on.  Calculate the sum of values in range [a,b] | Yes | No | No |  |
|  | Range Queries and Copies | Set the value a in array k to x.  Calculate the sum of values in range [a,b] in array k.  Create a copy of array k and add it to the end of the list. | Yes | No | No |  |