Range Chmin Chmax Add Range Sum

AC一覧

Problem Statement

Given a size N interger sequence $a_0, a_1, \ldots, a_{N-1}$. Process the following Q queries in order:

- `0` l r b : For each $i = l, \ldots, r-1$, $a_i \leftarrow \min(a_i, b)$
- `1` l r b : For each $i = l, \ldots, r-1$, $a_i \leftarrow \max(a_i, b)$
- `2` l r b : For each $i = l, \ldots, r-1$, $a_i \leftarrow a_i + b$
- `3` l r : Print $\sum_{i=l}^{r-1} a_i$

Constraints

- $1 \leq N, Q \leq 200{,}000$
- $|a_i| \leq 10^{12}$ is satisfied always while processing queries.
- $0 \leq l < r \leq N$

Input

N Q
a_0 a_1 ... a_{N-1}
Query_0
Query_1
:
Query_{Q-1}

1

```
5 7
1 2 3 4 5
3 0 5
2 2 4 100
3 0 3
0 1 3 10
3 2 5
1 2 5 20
3 0 5
```

```
15
106
119
147
```

FORUM

Timelimit: 10 secs