```cpp
 1  #include "../../bits/stdc++.h"
 2  // SegmentTree / DisjointSparseTable に載せるモノイド
 3  struct RangeMinimumQuery
 4  {
 5      using type = int;
 6      static type id() { return INT_MAX; }
 7      static type op(const type &l, const type &r) { return std::min(l, r); }
 8  };
 9
10  struct RangeMaximumQuery
11  {
12      using type = int;
13      static type id() { return -INT_MAX; }
14      static type op(const type &l, const type &r) { return std::max(l, r); }
15  };
16
17  struct RangeSumQuery
18  {
19      using type = int;
20      static type id() { return 0; }
21      static type op(const type &l, const type &r) { return l + r; }
22  };
23
```