

```

97 FenwickTree (BIT) (min \ max) query on 1D-Array:
98
99 //point update and [0 - r] range query
100 struct FenwickTreeMin {
101     vector<int> bit;
102     int n;
103
104     FenwickTreeMin(int n) {
105         this->n = n;
106         bit.assign(n, inf);
107     }
108
109     FenwickTreeMin(vector<int> a) : FenwickTreeMin(a.size()) {
110         for (size_t i = 0; i < a.size(); i++)
111             update(i, a[i]);
112     }
113
114     int get(int r) {
115         int ret = inf;
116         for (; r ≥ 0; r = (r & (r + 1)) - 1)
117             ret = min(ret, bit[r]);
118         return ret;
119     }
120
121     void update(int idx, int val) {
122         for (; idx < n; idx = idx | (idx + 1))
123             bit[idx] = min(bit[idx], val);
124     }
125 };

```