

$$\begin{array}{l} A = \\ \{a_1, \ldots, a_n\} \\ g \\ g_0 \\ f_g(A) \\ f_g \\ f_g(\{a_1, \ldots, a_k\}) = g(a_k, f(\{a_1, \ldots, a_{k-1}\}))f_g(\emptyset) = g_0 \\ ?? \\ g \\ g_0 \end{array}$$

$$g^{\max}(x,y) = \max(x,y)g_0^{\max} = -\infty g^{\text{sum}}(x,y) = x+yg_0^{\text{sum}} = 0$$

$$\begin{array}{l} f_g \\ g, g_0, A \\ yg_0 \\ i \leftarrow \\ 1, \ldots, |A| \\ yg(A[i], y) \\ y \\ RAM \\ g \\ N \\ T(N) = \\ N \\ A \\ \lceil \frac{N}{B} \rceil \\ B \\ \lceil \frac{N}{B} \rceil \\ B \\ ?? \\ A \\ A \\ \lfloor \frac{N}{B} \rfloor \\ \lfloor \frac{N}{B} \rfloor + \\ 2 \\ \lfloor \frac{N}{B} \rfloor < \\ \lceil \frac{N}{B} \rceil \\ \lceil \frac{N}{B} \rceil + \\ 1 \\ B \\ N \\ B \\ \frac{N-B}{B} = \\ \frac{N}{B} - \\ 1 \\ \lceil \frac{N}{B} \rceil + \\ 1 \\ N \\ B \\ RAM \\ \log N \\ N \\ \log N \\ \log_B N \\ ?? \\ K \\ 0, \ldots, N-1 \\ \forall i, j; 0 \leq \\ i < \\ j < \\ N; \\ A[i] \leq \\ A[j] \\ A, K \\ left0 \\ rightN \\ left < \\ right \\ mid \lfloor \frac{left+right}{2} \rfloor \\ A[mid] = \\ K \\ mid \\ A[mid] > \\ K \\ rightmid \\ leftmid + \\ 1 \\ K \notin \\ A \\ B \\ M \\ ?? \\ T(N) = T(N/2)+1 \\ T(1) = \\ 1 \end{array}$$