A
$|A| =$
N
$A =$
$\{a_1, , a_N\} \in$
X^N
$f_g(A)$
$g:$
$X \times$
$Y \to$
Y
$g_0 \in$
Y
f_g
$f_g(\{a_1, , a_k\}) = g(a_k, f(\{a_1, , a_{k-1}\}))f_g(\emptyset) = g_0$
??
f_g
g, g_0, A
yg_0
$i \leftarrow$
$1, , |A|$
$yg(A[i], y)$
y
g
g_0

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

T_g
g

$T(N) = 1+N[T_g+1] = T_g \cdot N$

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
$\frac{N}{B}$
B
RAM
$\log N$
N
??
K
$0, , N-$
1
$\forall i, j; 0 \leq$
$i <$
$j <$
$N ;$
$\texttt{A[}i\texttt{]} \leq$
$\texttt{A[}j\texttt{]}$
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