// LIS strictly increasing A[1]~A[N]

for (int i=2;i<=N+1;i++) g[i]=INF;

for (int i=1;i<=N;i++)

{

int k=lower\_bound(g+2,g+N+2,A[i]) - g;

//想改成non-decreasing的话

//只要换成upper\_bound就好了

dp[i] = k-1; // 以A[i]结尾的LIS长度

Ans = max(Ans, dp[i]);

g[k] = A[i];

}