一位RMQ(ST表) 模板例题

#include <iostream>

#include<cstdio>

#include<math.h>

using namespace std;

struct node

{

int max;

int min;

}dp[50005][22];

int a[50005];

int main()

{

int n, m, i, j, x, y, t, ans;

while(scanf("%d%d", &n, &m)!=EOF)

{

for(i=1;i<=n;i++)

scanf("%d", &a[i]);

for(i=1;i<=n;i++)

dp[i][0].max = dp[i][0].min = a[i];

for(j=1;(1<<j)<=n;j++)

{

for(i=1;i+(1<<j)-1<=n;i++)

{

dp[i][j].max = max(dp[i][j-1].max, dp[i+(1<<(j-1))][j-1].max);

dp[i][j].min = min(dp[i][j-1].min, dp[i+(1<<(j-1))][j-1].min);

}

}

for(i=1;i<=m;i++)

{

scanf("%d%d", &x, &y);

t=log2(y-x+1);

ans=max(dp[x][t].max, dp[y-(1<<t)+1][t].max)-min(dp[x][t].min, dp[y-(1<<t)+1][t].min);

printf("%d\n", ans);

}

}

return 0;

}