

## noip 看程序写结果练习 1

一、

```
#include <cstdio>
const int N=100005;
inline int mx(int a,int b){
    return a>b?a:b;
}
inline int work(int sum){
    char a;
    while (~scanf ("%c",&a)){
        if (a==' ') return sum;
        if (a=='a') sum++;
        if (a=='(') sum+=work(0);
        if (a=='|') {sum=mx(sum,work(0));break;}
    }
    return sum;
}
int main (){
    printf ("%d\n",work(0));
    return 0;
}
```

输入: aa(aa)|(aa|(a|aa))aa

输出:

二、

```
#include<iostream>
#include<algorithm>
using namespace std;
int n,r,q;
int a[200100],win[200100],lose[200100];
int s[200100],w[200100];
bool cmp(int x,int y)
{
    if(s[x]==s[y])    return x<y;
    return s[x]>s[y];
}
void merge()
{
    int i,j;
    i=j=1,a[0]=0;
    while(i<=win[0] && j<=lose[0])
        if(cmp(win[i],lose[j]))
            a[++a[0]]=win[i++];
        else
            a[++a[0]]=lose[j++];
}
```

```

    while(i<=win[0])a[++a[0]]=win[i++];
    while(j<=lose[0])a[++a[0]]=lose[j++];
}
int main()
{
    cin>>n>>r>>q;
    n*=2;
    for(int i=1; i<=n; i++)a[i]=i;
    for(int i=1; i<=n; i++)cin>>s[i];
    for(int i=1; i<=n; i++)cin>>w[i];
    sort(a+1,a+n+1,cmp);
    for(int i=1; i<=r; i++)
    {
        win[0]=lose[0]=0;
        for(int j=1; j<=n; j+=2)
            if(w[a[j]]>w[a[j+1]])
            {
                s[a[j]]++;
                win[++win[0]]=a[j];
                lose[++lose[0]]=a[j+1];
            }
            else
            {
                s[a[j+1]]++;
                win[++win[0]]=a[j+1];
                lose[++lose[0]]=a[j];
            }
        merge();
    }
    cout<<a[q];
    return 0;
}

```

输入:

```

2 4 2
7 6 6 7
10 5 20 15

```

输出:

三、

```

#include <cstdio>
#include <cstdlib>
#include <cstring>
#include <algorithm>

```

```

#define Open(s) freopen(s".in","r",stdin);
freopen(s".out","w",stdout);
#define Close fclose(stdin); fclose(stdout);
#define lowbit(x) x&(-x)
#define mo 92084931
using namespace std;
int n,M;
int ans;
int maxb;
int a[200001];
int b[200001];
int c[200001];
void input(int x)
{
    ++c[x];
    if(c[x]>=mo) c[x]-=mo;
    for(;x<=maxb;x+=lowbit(x))
    {
        ++b[x];
        if(b[x]>=mo) b[x]-=mo;
    }
}
int getsum(int x)
{
    int sum=-1*(c[x]);
    for(;x;x-=lowbit(x))
    {
        sum+=b[x];
        if(sum>=mo) sum-=mo;
    }
    return sum;
}
bool cmp(int x,int y)
{
    return a[x]<a[y];
}
int main()
{
    Open("smsz");
    scanf("%d %d", &n, &M);
    for(int i=1;i<=n;++i)
    {
        int x;
        scanf("%d",&x);
        a[i]=a[i-1]+x-M;
    }
}

```

```

        c[i]=i;
    }
    sort(c,c+n+1,cmp);
    for(int i=0;i<=n;++i)
    {
        for(int j=i+1;j<=n && a[c[i]]==a[c[j]];++j)
            b[c[j]]=-1;
        a[c[i]]=a[c[i-1]]+1;
        if(b[c[i]]<0)
        {
            a[c[i]]+=b[c[i]];
            b[c[i]]=0;
        }
        if(a[c[i]]>maxb) maxb=a[c[i]];
    }
    memset(c,0,sizeof(c));
    for(int i=0;i<=n;++i)
    {
        input(a[i]);
        ans+=getsum(a[i]);
        for(;ans>=mo;ans-=mo);
    }
    printf("%d",ans);
    Close;
    return 0;
}

```

}  
 输入:

4 4  
 5 2 7 3

输出: