其它

目录

1 快读

```
inline int read(){//如果是long long，这行和下面一行int改ll
    int x=0,f=1;
    char ch=getchar();
    while(ch<'0'||ch>'9'){
        if(ch=='-')
            f=-1;
        ch=getchar();
    }
    while(ch>='0'&&ch<='9'){
        x=(x<<1)+(x<<3)+(ch^48);
        ch=getchar();
    }
    return x*f;
}//打死我都不用！！！！
```

2 int128

```
inline __int128 read()
{
    __int128 x=0,f=1;
    char ch=getchar();
    while(ch<'0'||ch>'9')
    {
        if(ch=='-')
            f=-1;
        ch=getchar();
    }
    while(ch>='0'&&ch<='9')
    {
        x=x*10+ch-'0';
        ch=getchar();
    }
    return x*f;
}

inline void write(__int128 x)
```

```
{
    if(x<0)
    {
        putchar('-');
        x=-x;
    }
    if(x>9)
        write(x/10);
    putchar(x%10+'0');
}
```

3 对拍

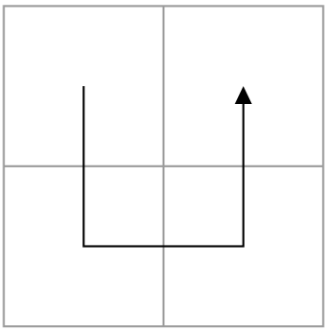
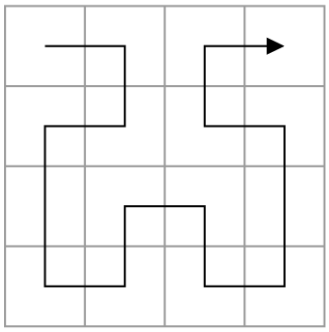
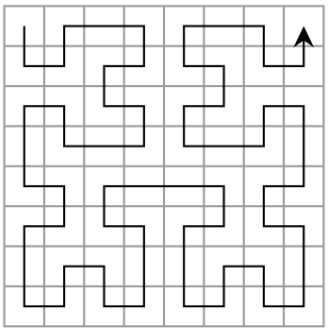
```
//————————————data.cpp————————————
int main()
{
    freopen("in","w",stdout);
    srand(time(0));
    int n,m,q;
    n = rand()%100000;
    m = rand()%100000;
    q = rand()%100000;
    printf("%d %d %d\n",n,m,q);
    for(int i = 1;i <= q;i++){
        int a = rand()%n+1;
        int b = rand()%n+1;
        int c = rand()%2;
        printf("%d %d %d\n",a,b,c);
    }
    return 0;
}

//————————————1.cpp&&2.cpp————————————————
int main()
{
    freopen("in","r",stdin);
    freopen("1.out","w",stdout);
    //freopen("2.out","w",stdout);
    .....
}

//————————————duipai.cpp————————————————
int main()//Windows
{
    int cases = 0;
    do{
        if(cases) printf("#%d AC\n",cases);
```

```
        cases++;
        system("data.exe > data.txt");
        system("1.exe < data.txt > 1.txt");
        system("2.exe < data.txt > 2.txt");
    }while(!system("fc 1.txt 2.txt"));
    printf("#%d WA",cases);
    return 0;
}
int main()//Linux
{
    int i;
    for (i=1;i<=1000;i++)
        {
            system("./data");
            system("./1");
            system("./2");
            printf("%d : ",i);
            if (system("diff 1.out 2.out"))
                {
                    printf("WA\n");
                    return 0;
                }
            else printf("AC\n");
        }
    return 0;
}
```

4 华容道

```
//判断是否有解
int map[16],ans=0;
for(int i=0;i<16;i++){
    scanf("%d",&map[i]);
    if(!map[i])
        ans+=6-i%4-i/4;
    for(int j=0;j<i;j++)
        if(map[j]>map[i])
            ans++;
}
if(ans&1)
    printf("Yes\n");
else
    printf("No\n");
```

5 希尔伯特曲线

```
#define ll long long
int two[50];//2的次方
ll f(int n, int x, int y) {//返回第几位
    if (n == 0) return 1;
    int m = two[n-1];//1 << (n - 1);//2的n-1次方
    if (x <= m && y <= m) {
        return f(n - 1, y, x);
    }
    if (x > m && y <= m) {
        return 3LL * m * m + f(n - 1, m-y+ 1, m * 2 - x + 1); // 3LL表示ll 类型的3
    }
    if (x <= m && y > m) {
        return 1LL * m * m + f(n - 1, x, y - m);
    }
    if (x > m && y > m) {
        return 2LL * m * m + f(n - 1, x - m, y - m);
    }
}
const int SIZE=1e6+50;
struct node{                                    //用于存点
    int x,y;
    ll no;
}p[SIZE];
int main() {
    int n;int k;
    scanf("%d%d",&n,&k);
    two[0]=1;                                   //tow[1]=2;
    for(int i=1;i<=32;i++){
        two[i]=2*two[i-1];
    }
    for(int i=1;i<=n;i++){
        scanf("%d%d",&p[i].y,&p[i].x);          //注意y,x的读入顺序!
        p[i].no=f(k,p[i].x,p[i].y);             //用于存点的编号
    }
}
```

6 约瑟夫环

6.1 一般方法

```
/* *  n个  人(编号 1...n),先去掉第m个数,然后从m+1个开始报1, *
  报到k的退出,剩下的  人继续从1开始报数.求胜利利者的编号. */
int main(int argc, const char *argv[])
{
    int n, k, m;
    while (cin >> n >> k >> m, n || k || m)
    {
        int i, d, s = 0;
        for (i = 2; i <= n; i++)
        {
            s = (s + k) % i;
        }
        k = k % n;
        if (k == 0)
        {
            k = n;
        }
        d = (s + 1) + (m - k);
        if (d >= 1 && d <= n)
        {
            cout << d << '\n';
        }
        else if (d < 1)
        {
            cout << n + d << '\n';
        }
        else if (d > n)
        {
            cout << d % n << '\n';
        }
    }
    return 0;
}
```

6.2 函数图像解

```
/* * n 个  人数到 k 出列列, 后剩下的人编号 */
unsigned long long n, k;
int main()
{
    cin >> n >> k;
    long long y = k % 2;
    long long x = 2, t = 0;
```

```
    long long z1 = y, z2 = x;
    while (x <= n)
    {
        z1 = y;
        z2 = x;
        t = (x - y) / (k - 1);
        if (t == 0)
        {
            t++;
        }
        y = y + t * k - ((y + t * k) / (x + t)) * (x + t);
        x += t;
    }
    cout << (z1 + (n - z2) * k) % n + 1 << endl;
    return 0;
}
```