

```
1  #include<bits/stdc++.h>
2  #define maxn 1001
3  using namespace std;
4  double eps = 1e-6;
5  struct line//线段类
6  {
7      double k, b;
8      int id;
9      line() {}
10     line(double K, double B, int Bh)
11     {
12         k = K; b = B; id = Bh;
13     }
14     line(int x1, int y1, int x2, int y2, int Bh)
15     {
16         k = double(y2 - y1) / (x2 - x1);
17         b = y1 - k * x1;
18         id = Bh;
19     }
20     double f(int x)
21     {
22         return k * x + b;
23     }
24 };
25 line zd[1600010];
26 bool bk[1600010];
27 double getjd(line a, line b)
28 {
29     if (fabs(a.k - b.k) < eps) return -1;
30     return (b.b - a.b) / (a.k - b.k);
31 }
32 bool check(line a, line b, int l, int r, int m, double x)
33 {
34     if (x < m) return a.f(r) > b.f(r);
35     else return a.f(l) > b.f(l);
36 }
37 void pur(int i, int l, int r, line a)
38 {
39     if (!bk[i]) {
40         zd[i] = a;
41         bk[i] = true;
42         return;
43     }
44     double x = getjd(a, zd[i]);
45     if (x < l || x > r) {
46         if (a.f(l) > zd[i].f(l)) zd[i] = a;
47         return;
48     }
49     int m = (l + r) >> 1;
50     if (check(zd[i], a, l, r, m, x)) {
51         line t = a;
52         a = zd[i];
53         zd[i] = t;
54     }
55     if (l < r) {
56         if (x <= m) pur(i << 1, l, m, zd[i]);
```

```
57         else pur((i << 1) | 1, m + 1, r, zd[i]);
58     }
59     zd[i] = a;
60 }
61 void insert(int i, int l, int r, int L, int R, line a) //插入
62 {
63     if (R < l || r < L) return;
64     if (L <= l && r <= R) {
65         pur(i, l, r, a);
66         return;
67     }
68     int m = (l + r) >> 1;
69     insert(i << 1, l, m, L, R, a);
70     insert((i << 1) | 1, m + 1, r, L, R, a);
71 }
72 int getma(int i, int l, int r, int k, double& z) //获取极大值
73 {
74     int rt;
75     if (bk[i]) {
76         rt = zd[i].id;
77         z = zd[i].f(k);
78     }
79     else {
80         rt = 0;
81         z = -99999999;
82     }
83     if (l == r) return rt;
84     int m = (l + r) >> 1, t;
85     double tz;
86     if (k <= m) t = getma(i << 1, l, m, k, tz);
87     else t = getma((i << 1) | 1, m + 1, r, k, tz);
88     if (tz > z || (fabs(tz - z) < eps && t < rt)) {
89         z = tz;
90         rt = t;
91     }
92     return rt;
93 }
94 int ma[40010], wz[40010];
95 int main()
96 {
97     int n, la = 0, m = 0;
98     scanf("%d", &n);
99     for (int i = 0; i < n; i++)
100     {
101         int lx;
102         scanf("%d", &lx);
103         if (lx == 0) {
104             int k;
105             scanf("%d", &k);
106             k = (k + la - 1) % 39989 + 1;
107             double z;
108             la = getma(1, 1, 39989, k, z);
109             if (ma[k] > z || (fabs(ma[k] - z) < eps && wz[k] < la)) la = wz
110                 [k];
111             printf("%d\n", la);
112         }
113     }
```

```
112     else {
113         m += 1;
114         int x0, y0, x1, y1;
115         scanf("%d%d%d%d", &x0, &y0, &x1, &y1);
116         x0 = (x0 + 1a - 1) % 39989 + 1;
117         x1 = (x1 + 1a - 1) % 39989 + 1;
118         y0 = (y0 + 1a - 1) % 1000000000 + 1;
119         y1 = (y1 + 1a - 1) % 1000000000 + 1;
120         if (x0 > x1) {
121             int t = x0;
122             x0 = x1; x1 = t;
123             t = y0;
124             y0 = y1; y1 = t;
125         }
126         if (x0 == x1) {
127             if (y1 > y0) y0 = y1;
128             if (y0 > ma[x0]) {
129                 ma[x0] = y0;
130                 wz[x0] = m;
131             }
132         }
133         insert(1, 1, 39989, x0, x1, line(x0, y0, x1, y1, m));
134     }
135 }
136 return 0;
137 }
```