

```
1  #include<stdio.h>
2  #include<string.h>
3  #include<vector>
4  #include<utility>
5  #include<algorithm>
6  using namespace std;
7
8  #define MAX 1123456
9
10 typedef pair<int, int> ii;
11
12 int n, pai[MAX], ra[MAX];
13 vector< pair<int, ii> > LA;
14
15 void Make(int x) { pai[x] = x; ra[x] = 0; }
16 int Find(int i) { return (pai[i] == i) ? i : (pai[i] = Find(pai[i])); }
17 int isSameSet(int i, int j) { return Find(i) == Find(j); }
18 void Union(int i, int j) {
19     int x, y;
20     if (!isSameSet(i, j)) {
21         x = Find(i); y = Find(j);
22         if (ra[x] > ra[y]) pai[y] = x;
23         else {
24             pai[x] = y;
25             if (ra[x] == ra[y]) ra[y]++;
26         }
27     }
28 }
29 int kruskal() {
30     int i, ret = 0;
31     for (i = 0; i < (int)LA.size(); i++) {
32         pair<int, ii> front = LA[i];
33         if (!isSameSet(front.second.first, front.second.second)) {
34             ret += front.first;
35             Union(front.second.first, front.second.second);
36         }
37     }
38     return ret;
39 }
40
41 int main(void) {
42     int i, u, v, w, menor, maior;
43     scanf("%d", &n);
44     for (i = 0; i < n; i++) {
45         scanf("%d %d %d", &u, &v, &w); u--; v--;
46         LA.push_back(make_pair(w, ii(u, v)));
47     }
48     for (i = 0; i < (int)LA.size(); i++) Make(i);
49     sort(LA.begin(), LA.end());
50     menor = kruskal();
51     reverse(LA.begin(), LA.end());
52     for (i = 0; i < (int)LA.size(); i++) Make(i);
53     maior = kruskal();
54     printf("%d\n%d\n", maior, menor);
55     return 0;
56 }
```