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struct Edge {
    int from, to, cap, flow;
    Edge(int u, int v, int c, int f) : from(u), to(v), cap(c), flow(f) {}
};

bool operator<(const Edge& a, const Edge& b) {
    return a.from < b.from || (a.from == b.from && a.to < b.to);
}

struct ISAP {
    int n, m, s, t;
    vector<Edge> edges;
    vector<int> G[maxn];
    bool vis[maxn];
    int d[maxn];
    int cur[maxn];
    int p[maxn];
    int num[maxn];

    void AddEdge(int from, int to, int cap) {
        edges.push_back(Edge(from, to, cap, 0));
        edges.push_back(Edge(to, from, 0, 0));
        m = edges.size();
        G[from].push_back(m - 2);
        G[to].push_back(m - 1);
    }

    bool BFS() {
        memset(vis, 0, sizeof(vis));
        queue<int> Q;
        Q.push(t);
        vis[t] = 1;
        d[t] = 0;
        while (!Q.empty()) {
            int x = Q.front();
            Q.pop();
            for (int i = 0; i < G[x].size(); i++) {
                Edge& e = edges[G[x][i] ^ 1];
                if (!vis[e.from] && e.cap > e.flow) {
                    vis[e.from] = 1;
                    d[e.from] = d[x] + 1;
                    Q.push(e.from);
                }
            }
        }
        return vis[s];
    }
};

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void init(int n) {
    this->n = n;
    for (int i = 0; i < n; i++) G[i].clear();
    edges.clear();
}

int Augment() {
    int x = t, a = INF;
    while (x != s) {
        Edge& e = edges[p[x]];
        a = min(a, e.cap - e.flow);
        x = edges[p[x]].from;
    }
    x = t;
    while (x != s) {
        edges[p[x]].flow += a;
        edges[p[x] ^ 1].flow -= a;
        x = edges[p[x]].from;
    }
    return a;
}

int Maxflow(int s, int t) {
    this->s = s;
    this->t = t;
    int flow = 0;
    BFS();
    memset(num, 0, sizeof(num));
    for (int i = 0; i < n; i++) num[d[i]]++;
    int x = s;
    memset(cur, 0, sizeof(cur));
    while (d[s] < n) {
        if (x == t) {
            flow += Augment();
            x = s;
        }
        int ok = 0;
        for (int i = cur[x]; i < G[x].size(); i++) {
            Edge& e = edges[G[x][i]];
            if (e.cap > e.flow && d[x] == d[e.to] + 1) {
                ok = 1;
                p[e.to] = G[x][i];
                cur[x] = i;
                x = e.to;
                break;
            }
        }
    }
    if (!ok) {

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    int m = n - 1;
    for (int i = 0; i < G[x].size(); i++) {
        Edge& e = edges[G[x][i]];
        if (e.cap > e.flow) m = min(m, d[e.to]);
    }
    if (--num[d[x]] == 0) break;
    num[d[x] = m + 1]++;
    cur[x] = 0;
    if (x != s) x = edges[p[x]].from;
}
}
return flow;
}
};
```