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#include <iostream>
#include <fstream>

using namespace std;

struct nod
{
    int info;
    nod *urm;
};
nod *L[20];

int a[20][20], n;

ifstream fin("graf.in");

void CitireMA()
{
    int i, j;
    fin >> n;
    while (fin >> i >> j)
        a[i][j] = a[j][i] = 1;
    fin.close();
}

void AfisareMA()
{
    int i, j;
    for (i = 1; i <= n; i++)
    {
        cout << endl;
        for (j = 1; j <= n; j++)
            cout << a[i][j] << " ";
    }
}

```

```

void CreareLista ()
{
    int i, j;
    nod *p, *q;
    for (i=1; i<=n; i++)
        for (j=1; j<=n; j++)
            if (a[i][j] != 0)

                if (L[i] == NULL)
                {
                    L[i] = new nod;
                    L[i]->info = j;
                    L[i]->urm = NULL;

                }
                else
                {
                    p = L[i];
                    while (p->urm)
                        p = p->urm;
                    q = new nod;
                    q->info = j;
                    q->urm = NULL;
                    p->urm = q;
                }
}

void AfisareVecini ()
{
    int i;
    cout << endl;
    for (i=1; i<=n; i++)
    {
        cout << endl << "Lista vecinilor nodului " << i;
    }
}

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    nod *q=L[i];
    if(q!=NULL)
        while(q)
        {
            cout<<" -> "<<q->info;
            q=q->urm;
        }
    else
        cout<<" -> "<<"NULL";
}
}
```

```
int main()
{
    CitireMA();
    AfisareMA();
    CreareLista();
    AfisareVecini();
    return 0;
}
```