

计算连通分量的算法

```
void Graph_List::Find_all_Component()
{
    int n=graphsize;
    int *markedList=new int[n]; //记录节点是否加入到连通分量
    int **WSM;
    WSM=Warshall( ); //求图的可及矩阵
    //int *scList=new int [graphsize];
    struct Node{
        int Vname;
        Node * link;
    };
    for(int i=0;i<n;i++)//初始化,
    {
        markedList[i]=0;
    }
    int t=0;
    for(int i=0;i<n;i++)
    {
        if(markedList[i]==0)
        {
            Node *scList=new Node; //一条连通分量链表的头结点
            t=t+1;
            markedList[i]=1;
            scList->Vname=i;
            scList->link=NULL;
            Node *q=new Node;
            q=scList;
            for(int j=0;j<n;j++)
            {
                if(i!=j&&WSM[i][j]==1&&WSM[j][i]==1)
                {
                    markedList[j]=1;
                    Node *p=new Node;
                    p->Vname=j;
                    p->link=NULL;
                    q->link=p;
                    q=p;
                }
            }
            //q=scList;
            cout<<"第"<<t<<"个连通分量: ";
            while(scList!=NULL){
                cout<<scList->Vname<<" ";
                q=scList;
                scList=scList->link;
                delete q;
            }
            cout<<endl;
        }
    }
}
```