

计算非循环图的传递闭包算法

//有向非循环图的传递闭包算法

```
void Graph_List::Tranclo()
{
    int n=graphsize;
    int *BREACH=new int[n];
    vector< vector<int> > reach; //数组reach的元素是集合类型
    int j=0;
    for (int i=0;i<n;i++){//初始化
    {
        BREACH[i]=0;
    }
    for (int i=n-1;i>=0;i--){//计算传递闭包
        vector<int> arr;
        BREACH[i]=1;
        arr.push_back(i);//初始化reach[i]={i}
        Edge *p = Head [ i ].adjacent;
        while(p != NULL){
            j=p-> VerAdj;
            if(BREACH[j]==0){
                vector<int> r;
                r=reach[n-j-1];//找到邻接点所存储的位置
                for(int b=0;b<r.size();b++){
                    if(BREACH[r[b]]==0){
                        arr.push_back(r[b]);
                        BREACH[r[b]]=1;
                    }
                }
            }
            p = p->link;
        }
        //记录顶点清零
        for(int c=0;c<arr.size();c++) {
            BREACH[arr[c]]=0;
        }

        reach.push_back(arr);
    }
    //打印可及顶点的集合
    for(int i=0;i<reach.size();i++){
        vector<int> tem=reach[i];
        cout <<n - i - 1 << " 的可及顶点集合:";
        for(int a=0;a<tem.size();a++){
            cout <<tem[a]<<",";
        }
        cout<<"\n";
    }
}
```