

HW10 PB20000034 林宸昊

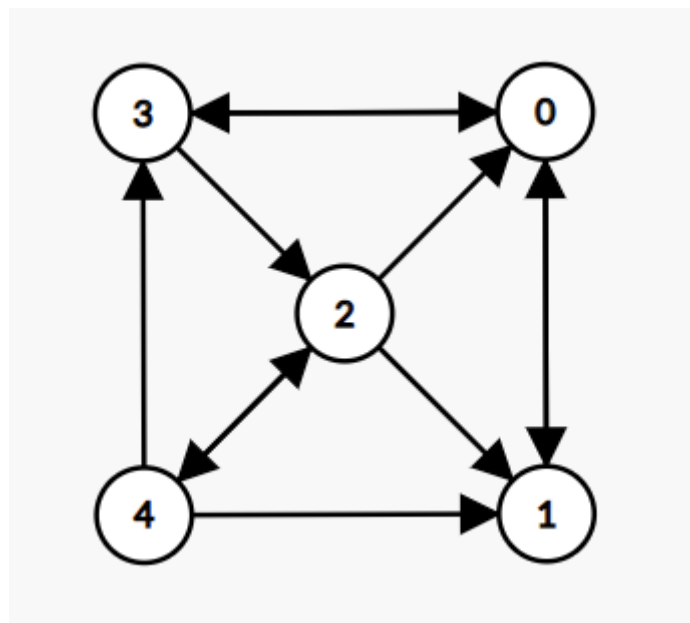
7.27

```
int order = 0;
int visit[MAX];
int Path(ALGraph g, int v, int w, int k) {
    ArcNode *p;

    visit[v] = ++order; //visit数组用于标记目前是第几个
    if (v == w && k == 0) return 1; //找到目标路径
    else if (k > 0) {
        //进行深度优先搜索
        for (p = g.vexs[v].firstarc; p; p = p->nextarc) {
            if (visit[p->adjv] == 0) { //没有经过
                if (Path(g, p->adjv, w, k - 1))
                    return 1;
                else
                    visit[p->adjv] = 0;
                order--; //此路不通换路
            }
        }
    }
    return 0;
}
```

ppt_p63

- 原图



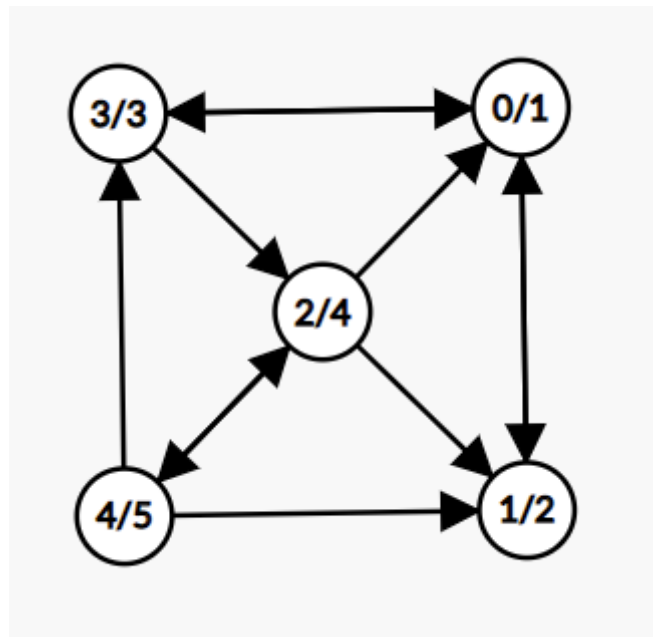
- 邻接矩阵

```
0 1 0 1 0
1 0 0 0 0
1 1 0 0 1
```

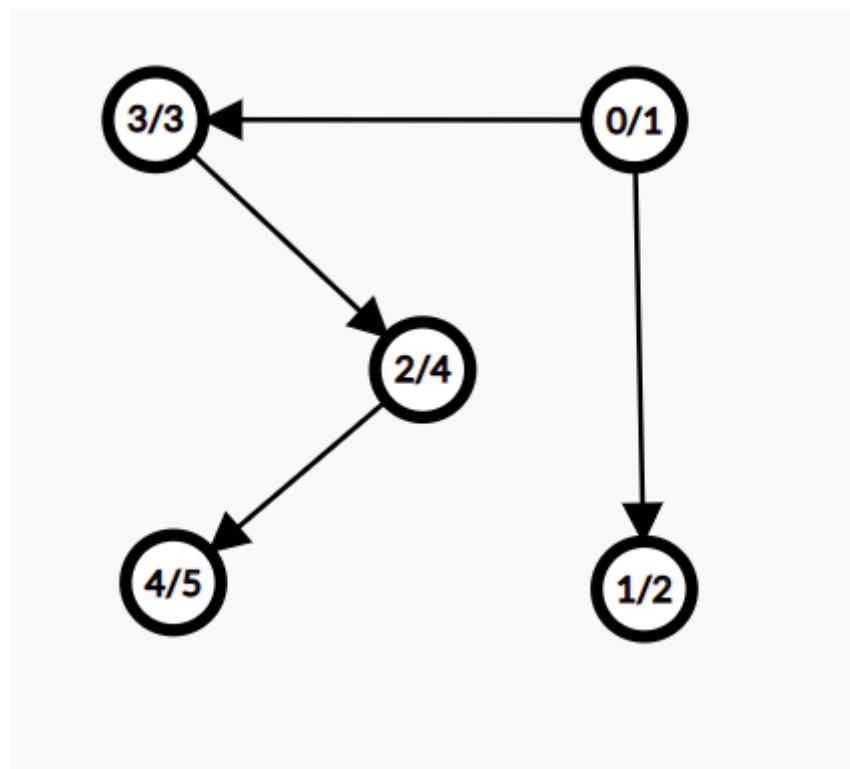
1 0 1 0 0

0 1 1 1 0

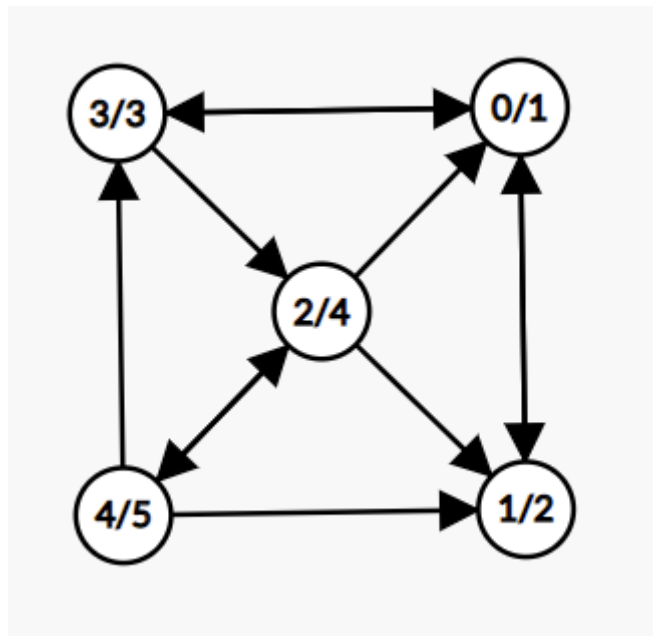
- 深度优先遍历序列



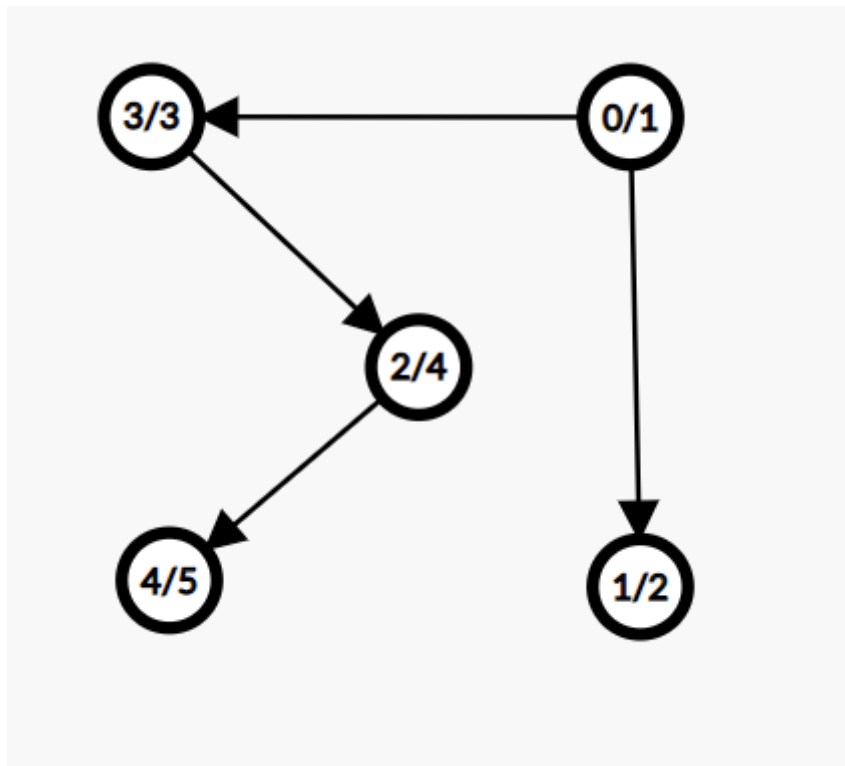
- 生成树



- 广度优先遍历序列

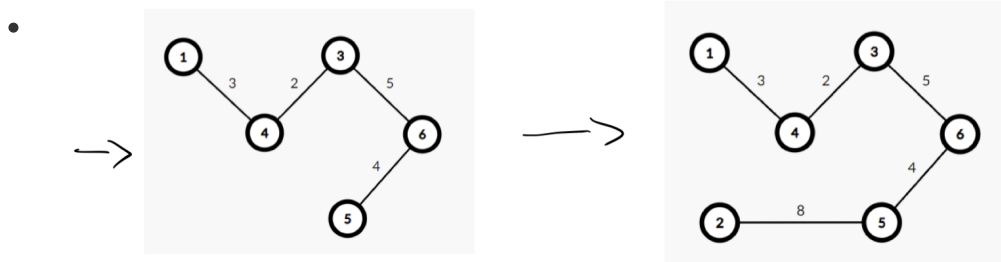
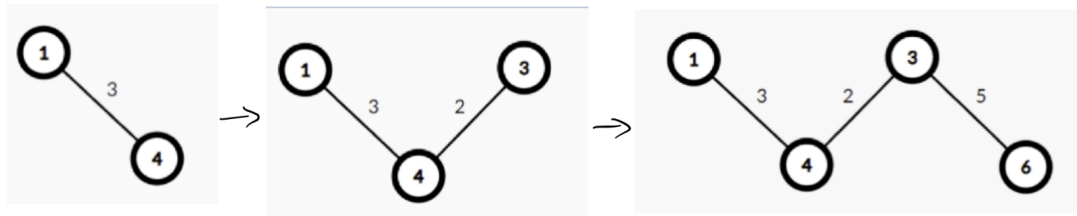


- 生成树



ppt_p83

- 普利姆算法 (从1开始)



- 克鲁斯卡尔算法

