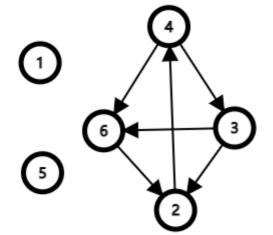
HW9 林宸昊 PB20000034

7.1

- 入/出度
 - 1:3/0
 - 2: 2/2
 - 3: 1/2
 - 4: 1/3
 - 5: 2/1
 - 6: 2/3
- 邻接矩阵
 - 000000
 - 100100
 - 0 1 0 0 0 1
 - 0 0 1 0 1 1
 - 100000
 - 1 1 0 0 1 0
- 邻接表
 - 1#
 - 2-->1-->4#
 - 3->2->6#
 - 4->3->5->6#
 - 5—>1#
 - 6->1->2->5#
- 逆邻接表
 - 1->2->5->6#
 - 2->3->6#
 - 3->4#
 - 4-->2#
 - 5->4->6#
 - 6->3->4#



• 强连通分量

7.14

```
typedef struct ArcNode
   char adjvex;
    struct ArcNode *nextarc;
    InfoType *info;
} ArcNode;
typedef struct VNode
    char vex;
    ArcNode *firstarc;
    InfoType *info;
} VNode, AdjList[MAX_VERTEX_NUM];
typedef struct ALGraph
   AdjList vexs;
   int vexnum, arcnum;
} ALGraph;
int create(ALGraph *g)
    cin >> g->vexnum >> g->arcnum;
    for (int i = 0; i < g->vexnum; i++)
        cin >> g->vexs[i].vex;
        cin >> g->vexs[i].info;
```

```
g->vexs[i].firstarc = NULL;
    }
   for (int i = 0; i < g->arcnum; i++)
       char a, b;
       cin >> a >> b;
       int i = LocateVex(g, a);
       int j = LocateVex(g, b);
       ArcNode *p, *q;
       p = (ArcNode *)malloc(sizeof(ArcNode));
       q = (ArcNode *)malloc(sizeof(ArcNode));
       p->adjvex = a;
       p->nextarc = g->vexs[j].firstarc;
       g->vexs[j].firstarc = p;
       q->adjvex = b;
       q->nextarc = g->vexs[i].firstarc;
       g->vexs[i].firstarc = q;
       cin >> q->info >> q->info;
   }
}
```