# 线性表：

操作日志：

|  |  |  |  |
| --- | --- | --- | --- |
| LogId | 操作 | 内容 | 索引(index) |
| 1 | 初始化 | 随机+(\*数量) | — |
| 2 | 插入 | a | 3 |
| 3 | 删除 | b |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Operation | targetId(index) | data | step | 例句： |
| Initialize **\*** nodes randomly | initialize | 100 |  |  | Initialize **100** nodes randomly |
| Insert value **\*** to index **\*** | insert | **\*** | **\*** | -1 | Insert value **b** to index **0** |
| Delete value **\*** | delete | -1 | **\*** | -1 | Delete value **a** |
| Back to step **\*** | Back to | -1 | null | **\*** | Back to step **2** |
| Insert value \* | insert | -1 | \* | -1 | Insert value \* |

Insert value a

Insert value **b** to index **0**

Delete value **a**

Back to step **2**

# 二叉树：

|  |  |  |
| --- | --- | --- |
| Id | Operation | Content |
| 1 | 插入 | a添加节点b |
| 2 | 插入 | a添加c |
| 3 | 删除 |  |
| 4 | 创建根节点 |  |

操作日志：

create root node a

insert left node b to a

insert right node c to a

Delete value a

Back to step **2**

# 图：

操作日志：

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LogId | 操作 | SelectId | TargetId | 内容 |
| 1 | 插入顶点 | -1 | -1 | A |
| 2 | 删除顶点 | -1 | -1 | A |
| 3 | 插入边 | .1 | 2 | 5 |
| 4 | 删除边 | 1 | 2 | null |

Add vertex from null to null value a/ Add vertex from a to b value c

Delete vertex value \*

Add edge from a to b weight 2

Delete edge from a to b

Back to step **2**