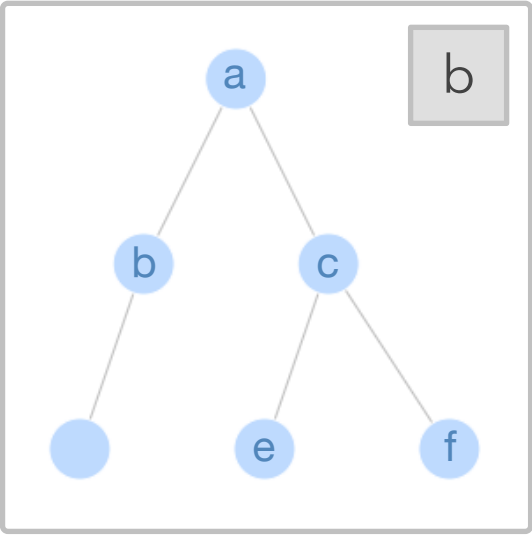


```
1 {
2   "nodes": [
3     {"name": "a", "depth": 0}, {"name": "b", "depth": 1},
4     {"name": "c", "depth": 1}, {"name": "d", "depth": 2},
5     {"name": "e", "depth": 2}, {"name": "f", "depth": 2}
6   ],
7   "links": [
8     {"source": 0, "target": 1},
9     {"source": 0, "target": 2},
10    {"source": 1, "target": 3},
11    {"source": 2, "target": 4},
12    {"source": 2, "target": 5}
13  ],
14  "constraintDefinitions": [
15    {
16      "name": "layer",
17      "sets": {"partition": "depth"},
18      "forEach": [{ "constraint": "align", "axis": "x" }]
19    },
20    {
21      "name": "sort",
22      "sets": ["layer"],
23      "forEach": [{ "constraint": "order", "axis": "y", "by": "depth" }]
24    }
25  ]
26 }
```



a

3 sets: [a], [b,c], [d,e,f]
3 constraints

1 set: "layer"
8 constraints

```
1 {
2   "nodes": [
3     {"name": "a", "_id": 0, "depth": 0}, {"name": "b", "_id": 1, "depth": 1},
4     {"name": "c", "_id": 2, "depth": 1}, {"name": "d", "_id": 3, "depth": 2},
5     {"name": "e", "_id": 4, "depth": 2}, {"name": "f", "_id": 5, "depth": 2},
6     {
7       "name": "set0_order_boundary_0", "_id": 6,
8       "cid": "set0_order",
9       "temp": true, "fixed": true,
10      "width": 1, "height": 1, "padding": 0,
11      "boundary": "y", "y": 0, "x": 0,
12    },
13     {
14       "name": "set0_order_boundary_1", "_id": 7,
15       "cid": "set0_order",
16       "temp": true, "fixed": true,
17       "width": 1, "height": 1, "padding": 0,
18       "boundary": "y", "y": 30, "x": 10,
19     }
20   ],
21   "links": [...],
22   "constraints": [
23     {
24       "type": "alignment", "axis": "y",
25       "offsets": [{"node": 0, "offset": 0}],
26       "_type": "layer_align"
27     },
28     {
29       "type": "alignment", "axis": "y",
30       "offsets": [{"node": 1, "offset": 0}, {"node": 2, "offset": 0}],
31       "_type": "layer_align"
32     },
33     {
34       "type": "alignment", "axis": "y",
35       "offsets": [{"node": 3, "offset": 0}, {"node": 4, "offset": 0}, {"node": 5, "offset": 0}],
36       "_type": "layer_align"
37     },
38     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 0, "right": 6},
39     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 6, "right": 1},
40     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 1, "right": 7},
41     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 6, "right": 2},
42     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 2, "right": 7},
43     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7, "right": 3},
44     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7, "right": 4},
45     {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7, "right": 5}
46   ]
47 }
```

C

Temporary nodes added to act as boundaries in the order constraint

3 WebCoLa alignment constraints are created: one for each set in the SetCoLa "layer" constraint

8 WebCoLa position constraints are generated to order the three layers for the "sort" constraint