```
2
        "nodes": [
                                                                                                                                                a
          {"name": "a", "depth": 0}, {"name": "b", "depth": 1}, {"name": "c", "depth": 1}, {"name": "d", "depth": 2}, {"name": "f", "depth": 2}
 3
                                                                                                                                  b
                                                                                                                a
 4
 5
 6
 7
        "links": [
           {"source": 0, "target": 1},
 8
                                                                                                                        C
           {"source": 0, "target": 2},
 9
           {"source": 1, "target": 3},
10
           {"source": 2, "target": 4},
11
           {"source": 2, "target": 5}
12
13
14
        "constraintDefinitions": [
15
              "name": "layer"
16
              "sets": {"partition": "depth"},
17
                                                                                                                                 3 sets: [a], [b,c], [d,e,f]
              "forEach": [{ "constraint": "align", "axis": "x" }]
                                                                                                                                          3 constraints
19
20
           {
              "name": "sort",
21
              "sets": ["layer"],
              "forEach": [{ "constraint": "order", "axis": "y", "by": "depth" }]
                                                                                                                                          8 constraints
24
25
        ]
26
    }
 1
 2
                                                                                                                                                C
           {"name": "a", "_id": 0, "depth": 0}, {"name": "b", "_id": 1, "depth": 1}, {"name": "c", "_id": 2, "depth": 1}, {"name": "d", "_id": 3, "depth": 2}, {"name": "e", "_id": 5, "depth": 2},
 3
 4
 5
              "name": "boundary0", "_id": 6, "cid": "set0_order",
              "temp": true, "fixed": true,
              "width": 1, "height": 1, "padding": 0, "boundary": "y", "y": 0, "x": 0,
                                                                                                                                  Two temporary nodes
11
                                                                                                                                 are added to the graph
                                                                                                                                   to act as boundaries
              "name": "boundary1", "_id": 7, "cid": "set0_order",
                                                                                                                                for the order constraint.
              "temp": true, "fixed": true,
              "width": 1, "height": 1, "padding": 0, "boundary": "y", "y": 30, "x": 10,
15
17
18
        "links": [...],
19
20
        "constraints": [
21
              "_type": "layer_align",
              "type": "alignment", "axis": "y"
29
30
              "offsets": [{"node": 0,"offset": 0}]
31
                                                                                                                                     We generate three
                                                                                                                                   WebCoLa alignment
              "_type": "layer_align",
             "type": "alignment", "axis": "y",
                                                                                                                                    constraints: one for
34
                                                                                                                                  each set produced by
              "offsets": [{"node": 1,"offset": 0},{"node": 2,"offset": 0}],
                                                                                                                                   the SetCoLa "layer"
                                                                                                                                   constraint definition.
              "_type": "layer_align",
              "type": "alignment", "axis": "y"
39
              "offsets": [{"node": 3,"offset": 0},{"node": 4,"offset": 0},{"node": 5,"offset": 0}]
40
41
           {"_type": "set0_order", "axis": "y", "gap": 0, "left": 0, "right": 6},
               type": "set0_order"
                                           , "axis": "y"
                                                                 "gap": 0, "left": 6, "right": 1},
           {"_type": "set0_order", "axis": "y", "gap": 0, "left": 1, {"_type": "set0_order", "axis": "y", "gap": 0, "left": 6, {"_type": "set0_order", "axis": "y", "gap": 0, "left": 2, {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7, {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7, {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7, {"_type": "set0_order", "axis": "y", "gap": 0, "left": 7,
                                                                                                                                     We generate eight
                                                                                               "right": 7},
44
                                                                                                                                     WebCoLa position
                                                                                                "right": 2},
                                                                                                                                constraints to order the
                                                                                                "right": 7},
                                                                                                                                 three layers based on
                                                                                                "right": 3},
                                                                                                                                   the SetCoLa "sort"
                                                                                                "right": 4},
                                                                                                                                   constraint definition.
                                                                "gap": 0, "left": 7,
                                                                                                "right": 5}
50
51 }
```

1 {