```
BLOCK entry {
                                        schedule_start <- §SELECT o.o_orderdate</pre>
                                                            FROM orders AS o
                                                           WHERE o.o_orderkey = {0}\s[orderkey];
                                        GOTO inter0
                                                  BLOCK inter0 {
                                                    IF §{0} IS NULL§[schedule_start]
                                                    THEN GOTO truthy0
                                                    ELSE GOTO falsey0
                                                       BLOCK falsey0 {
                                                         details <- §SELECT {{items: COUNT(*), last_shipdate: MAX(l.l_shipdate)}}</pre>
                                   BLOCK truthy0 {
                                                                      FROM lineitem AS l
                                    STOP
                                                                      WHERE l.l_orderkey = {0}\s[orderkey];
                                                         GOTO inter1
                                                                     BLOCK inter1 {
                                                                       schedule_end <- §{0}.last_shipdate§[details];</pre>
                                                                       GOTO inter2
                                                               BLOCK inter2 {
                                                                 busy <- §ARRAY[] :: struct(start date, finish date)[]§[];</pre>
                                                                 GOTO inter3
                                                                                   BLOCK inter3 {
                                                                                     priority <- §1§[];</pre>
                                                                                     GOTO inter4
                                                                                  BLOCK inter4 {
                                                                                    GOTO outer_loop_head
                                                                        BLOCK outer_loop_head {
                                                                          IF §{0} > {1}.items§[priority, details]
                                                                          THEN GOTO truthy1
                                                                          ELSE GOTO falsey1
                                                    BLOCK falsey1 {
                                                      lineitem <- §SELECT l.lineitem</pre>
                                                                          (SELECT ROW_NUMBER() OVER (ORDER BY p.p_retailprice),
                                                                                  {{l_linenumber: l.l_linenumber,
                                                                                   l_shipdate: l.l_shipdate,
                               BLOCK truthy1 {
                                                                                   l_quantity: l.l_quantity}}
                                 STOP
                                                                           FROM lineitem AS l, part AS p
                                                                           WHERE l.l_orderkey = {0}
                                                                           AND l.l_partkey = p.p_partkey) AS l(priority, lineitem)
                                                                           l.priority = {1}\s[orderkey, priority];
                                                                   WHERE
                                                      GOTO inter5
                                                         BLOCK inter5 {
                                                           item_end <- $LEAST({0}.l_shipdate, {1})$[lineitem, schedule_end];</pre>
                                                           GOTO inter6
                                             BLOCK inter6 {
                                               item_start <- §{0} - {1}.l_quantity :: int§[item_end, lineitem];</pre>
                                               GOTO inter7
                                         BLOCK inter7 {
                                           GOTO inner_loop_head
                        BLOCK inner_loop_head {
                          new_end <- §SELECT slot.start</pre>
                                      FROM unnest({0}) AS _(slot)
                                      WHERE slot.start < {1}
                                      AND {2} < slot.finish
                                      ORDER BY (slot.start, slot.finish)
                                      LIMIT 1§[busy, item_end, item_start];
                          GOTO inter8
             BLOCK inter8 {
               IF §{0} >= {1} AND {2} IS NOT NULL§[item_start, schedule_start, new_end]
               ELSE GOTO falsey2
                               BLOCK truthy2 {
                                                                            BLOCK falsey2 {
                                 item_end <- §{0}§[new_end];
                                                                              GOTO inner_loop_exit
                                 GOTO inter9
                                                                               BLOCK inner_loop_exit {
      BLOCK inter9 {
                                                                                 IF §{0} >= {1}§[item_start, schedule_start]
        item_start <- §{0} - {1}.l_quantity :: int§[item_end, lineitem];</pre>
                                                                                 THEN GOTO truthy3
         GOTO inter10
                                                                                 ELSE GOTO falsey3
                                                                   BLOCK truthy3 {
                       BLOCK inter10 {
                                                                     busy <- §list_append({0}, ({1}, {2}))§[busy, item_start, item_end];</pre>
                        GOTO merge2
                                                                     GOTO inter12
                                                                          BLOCK inter12 {
BLOCK merge2 {
                                                                            EMIT §({0}.l_linenumber, {1})§[lineitem, item_start];
 JUMP inner_loop_head
                                                                            GOTO inter13
                                                                BLOCK falsey3 {
                                                                                               BLOCK inter13 {
                                                                  GOTO merge3
                                                                                                 GOTO merge3
                                                                                     BLOCK merge3 {
                                                                                       priority <- §{0} + 1§[priority];</pre>
                                                                                       GOTO inter14
                                                                                                             BLOCK inter14 {
                                                                                                              GOTO merge1
                                                                                                                BLOCK merge1 {
                                                                                                                 JUMP outer_loop_head
```