a) $L_1 =: \sigma_{city='A\theta\eta\nu\alpha'}$ (CLIENT)

$L_2 =: \sigma_{client\_id=L_1.client\_id}$ (ORDER)

$L_3 =:$ PRODUCT JOIN L_2

$L_4 =: \Pi_{product\_id, supplier}$ (L_3)

$\Pi_{product\_id, supplier}$ (PRODUCT JOIN ($\sigma_{client\_id=L_1.client\_id}$ (

$\sigma_{city='A\theta\eta\nu\alpha'}$ (CLIENT))))

b) $L_1 =:$ ORDER JOIN PRODUCT

$L_2 =: \sigma_{stock='0'}$ (L_1)

$L_3 =: \sigma_{client\_id=L_2.client\_id}$ (CLIENT)

$L_4 =: \Pi_{name, address}$ (L_3)

$\Pi_{name, address}$ ($\sigma_{client\_id=L_2.client\_id}$ ($\sigma_{stock='0'}$ (

ORDER JOIN PRODUCT)))

c) $L_1 =:$ ORDER JOIN PRODUCT

$L_2 =: \sigma_{supplier='ABC'}$ (L_1)

$L_3 =:$ ORDER $- L_2$

$L_4 =: \Pi_{client\_id}$ (L_3)

$L_5 =: \sigma_{client\_id=L_4.client\_id}$ (CLIENT)

$L_6 =: \Pi_{city}$ (L_5)

Π_{city} ($\sigma_{client\_id=L_4.client\_id}$ (Π_{client_id} (ORDER $-$

$\sigma_{supplier='ABC'}$ (ORDER JOIN PRODUCT))))

d) $L_1 =: \sigma_{city = 'Adiva'} (CLIENT)$

$L_2 =: \sigma_{client\_id = L_1.client\_id} (ORDER)$

$L_3 =: \sigma_{stock = 'max'} (PRODUCT)$

$L_4 =: \sigma_{product\_id = L_3.product\_id} (ORDER)$

$L_5 =: L_2 \cap L_4$

$L_6 =: \Pi_{orderNo} (L_5)$

$\Pi_{orderNo} (\sigma_{client\_id = L_1.client\_id} (\sigma_{city = 'Adiva'} (CLIENT))) \cap$
$(\sigma_{product\_id = L_3.product\_id} (\sigma_{stock = 'max'} (PRODUCT)))$

— / — / — / — / — / —

a) SELECT product_id, supplier FROM PRODUCT
   WHERE product_id IN (SELECT client_id FROM ORDER
       WHERE client_id IN (SELECT client_id FROM CLIENT
           WHERE city = 'Adiva'))

b) SELECT name, address FROM CLIENT
   WHERE client_id IN (SELECT client_id FROM ORDER
       WHERE product_id IN (SELECT product_id FROM PRODUCT
           WHERE stock = '0'))

c) SELECT city FROM CLIENT
   WHERE client.id IN (SELECT client.id FROM ORDER
      WHERE product.id IN (SELECT product.id FROM PRODUCT
         WHERE supplier != 'ABC'))

d) SELECT orderNo FROM ORDER
   WHERE product.id, ~~client~~ AND client_id IN (
   SELECT product.id, ~~client~~ client_id FROM PRODUCT p, CLIENT c
   WHERE p.stock = 'max' AND c.city = 'Adina'