--1

τ customername asc π customername σ (customers.state ≠ Offices.state and customers.country = Offices.country) or (customers.country ≠ Offices.country) ( ( customers ⨝ Employees.employeeNumber = customers.salesRepEmployeeNumber Employees ) ⨝ Offices.officeCode = Employees.officeCode Offices )Diagram

Description automatically generated

--2

τcustomername asc (πcustomername (σproductName like '%Pont Yacht%' ((customers) ⨝ orders.customerNumber = customers.customerNumber (orders) ⨝ OrderDetails.orderNumber = orders.orderNumber (OrderDetails) ⨝ products.productCode = OrderDetails.productCode (products))))

Diagram

Description automatically generated

--3

π O.city, O.state, O.country σ P.productName = '1928 Mercedes-Benz SSK' ( ( ( ( ( ρ E Employees ⨝ O.officeCode = E.officeCode ρ O Offices ) ⨝ E.employeeNumber = C.salesRepEmployeeNumber ρ C customers ) ⨝ C.customerNumber = O2.customerNumber ρ O2 orders ) ⨝ O2.orderNumber = O3.orderNumber ρ O3 OrderDetails ) ⨝ P.productCode = O3.productCode ρ P products )Text, letter

Description automatically generated

--4

τ customername,orderDate (π customers.customername,orders.orderNumber,orderDate,ShippedDate,quantityOrdered,productLine,productName σ orders.orderDate ≥date('2013-05-01') ∧ orders.orderDate ≤date('2013-05-31') ∧ MONTH(orders.ShippedDate) ≠ (5) ( (customers ⨝ orders ⨝ OrderDetails ⨝ products)))

Diagram

Description automatically generated

--5

τcustomers.customername,orders.orderNumber (πcustomers.customername,orders.orderNumber,orders.orderDate,status (σOrderDetails.quantityOrdered ≥ products.quantityInStock ((customers) ⨝ customers.customerNumber = orders.customerNumber (orders) ⨝ orders.orderNumber = OrderDetails.orderNumber (OrderDetails) ⨝ OrderDetails.productCode = products.productCode (products))))Text, letter

Description automatically generated