Part One

1. List the names of the cities in alphabetical order where Classic Models has offices. (7)

```
SELECT city from "alanparadise/cm"."offices"
  ORDER BY 1
```

2. List the EmployeeNumber, LastName, FirstName, Extension for all employees working out of the Paris office. (5)

```
SELECT employeeNumber, lastName, firstName, extension FROM
    "alanparadise/cm"."offices" O RIGHT JOIN
    "alanparadise/cm"."employees" E
        ON o.officeCode = e.officeCode
  WHERE city = 'Paris'
```

3. List the ProductCode, ProductName, ProductVendor, QuantityInStock and ProductLine for all products with a QuantityInStock between 200 and 1200. (11)

```
SELECT productCode, productName, productScale, productVendor, quantityInStock,
productLine
    FROM "alanparadise/cm"."products"
  WHERE quantityInStock BETWEEN 200 AND 1200
```

4. (Use a SUBQUERY) List the ProductCode, ProductName, ProductVendor, BuyPrice and MSRP for the least expensive (lowest MSRP) product sold by ClassicModels. ("MSRP" is the Manufacturer's Suggested Retail Price.) (1)

```
SELECT productCode, productName, productVendor, buyPrice, MSRP
    FROM "alanparadise/cm"."products"
  WHERE productCode = (
    select productCode FROM "alanparadise/cm"."products"
    ORDER BY MSRP LIMIT 1
  )
```

5. What is the ProductName and Profit of the product that has the highest profit (profit = MSRP minus BuyPrice). (1)

```
SELECT productName,(MSRP - buyPrice) as "profit"
    FROM "alanparadise/cm"."products"
    ORDER BY profit DESC LIMIT 1
```

6. List the country and the number of customers from that country for all countries having just two customers. List the countries sorted in ascending alphabetical order. Title the column heading for the count of customers as "Customers". (7) **Showing 8 with this code

```
SELECT country, COUNT(DISTINCT customernumber) AS "customers"
    FROM "alanparadise/cm"."Customers"
    GROUP BY country
    HAVING COUNT(DISTINCT customernumber) = 2
    ORDER BY country ASC
```

7. List the ProductCode, ProductName, and number of orders for the products with exactly 25 orders. Title the column heading for the count of orders as “OrderCount”. (12)

```
SELECT r.productcode, productName, COUNT(o.orderNumber) AS "ordercount"
    FROM "alanparadise/cm"."products" r
    JOIN
    "alanparadise/cm"."orderdetails" d ON r.productcode = d.productcode
    JOIN
    "alanparadise/cm"."orders" o ON d.orderNumber = o.orderNumber
    GROUP BY r.productcode, productName
    HAVING COUNT(o.orderNumber) = 25
```

8. List the EmployeeNumber, Firstname + Lastname (concatenated into one column in the answer set, separated by a blank and referred to as ‘name’) for all the employees reporting to Diane Murphy or Gerard Bondur. (8)

```
SELECT employeenumber, CONCAT(firstname, ' ', lastname) AS "name"
    FROM "alanparadise/cm"."employees"
    WHERE reportsto in (
      SELECT employeenumber FROM "alanparadise/cm"."employees"
      WHERE CONCAT(firstname, ' ', lastname)
        IN ('Diane Murphy', 'Gerard Bondur'))
```

9. List the EmployeeNumber, LastName, FirstName of the president of the company (the one employee with no boss.) (1)

```
SELECT employeenumber, lastname, firstname, reportsto
  FROM "alanparadise/cm"."employees"
  WHERE reportsto IS NULL
```

10. List the ProductName for all products in the “Classic Cars” product line from the 1950’s. (6)

```
SELECT productname FROM "alanparadise/cm"."products"
  WHERE productname LIKE '195%' AND productline = 'Classic Cars'
```

11. List the month name and the total number of orders for the month in 2004 in which ClassicModels customers placed the most orders. (1) *** Not Grouping Properly

SELECT extract(month from TO_DATE(orderdate)) AND COUNT(orderNumber) AS "order count" FROM

```
SELECT extract(month from CAST(orderdate as DATE)) as "month", COUNT(o.orderNumber) AS "ordercount" FROM
  "alanparadise/cm"."products" p
  JOIN
  "alanparadise/cm"."orderdetails" d ON p.productcode = d.productcode
  JOIN
  "alanparadise/cm"."orders" o ON d.ordernumber = o.ordernumber
  GROUP BY o.orderdate
  HAVING extract(year from CAST(orderdate as DATE)) = '2004'
  ORDER BY DESC
```

12. List the firstname, lastname of employees who are Sales Reps who have no assigned customers. (2)

```
SELECT firstname, lastname FROM "alanparadise/cm"."employees" e
  left JOIN
  "alanparadise/cm"."Customers" c ON  e.employeenumber=c.salesrepemployeenumber
  GROUP BY firstname, lastname
  HAVING count(customernumber) = 0
```

13. List the customername of customers from Switzerland with no orders. (2)

14. List the customername and total quantity of products ordered for customers who have ordered more than 1650 products across all their orders. (8)

Part 2

1. Create a NEW table named “TopCustomers” with three columns: CustomerNumber (integer), ContactDate (DATE) and OrderTotal (a real number.) None of these columns can be NULL.

2. Populate the new table “TopCustomers” with the CustomerNumber, today’s date, and the total value of all their orders (PriceEach * quantityOrdered) for those customers whose order total value is greater than $140,000. (should insert 10 rows)

3. List the contents of the TopCustomers table in descending OrderTotal sequence. (10)

4. Add a new column to the TopCustomers table called OrderCount (integer).

5. Update the Top Customers table, setting the OrderCount to a random number between 1 and 10. (Use RANDOM() * 10)

6. List the contents of the TopCustomers table in descending OrderCount sequence. (10 rows)

7. Drop the TopCustomers table. (no answer set)