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----=====================================================----
--Part One: Query Problems Using the “alanparadise/cm” repo
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--1
-- List  the names of the cities in alphabetical order where Classic Models has offices. (7)
SELECT  DISTINCT 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"."employees"
where officecode = 4;

--3
--List the ProductCode, ProductName, ProductVendor, QuantityInStock and ProductLine for all
products with a QuantityInStock between 200 and 1200. (11)
select  ProductCode, ProductName, 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" order by 5 asc limit (select 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 2 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)
select country, count(customernumber) as “Customers”
from "alanparadise/cm"."Customers"
group by 1
having count(customernumber) = 2
order by 1 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)
```

```sql
select o.ProductCode, p.ProductName, count(orderlinenumber) as “OrderCount”
from "alanparadise/cm"."orderdetails" as o
join "alanparadise/cm"."products" as p on o.ProductCode = p.ProductCode
group by 1, 2
having count(orderlinenumber) = 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, Firstname || ' ' || Lastname as ‘name’
from "alanparadise/cm"."employees";

--9
-- List the EmployeeNumber, LastName, FirstName of the president of the company (the one employee with no boss.)  (1)
select EmployeeNumber, Lastname, Firstname 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';

--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)

--Working to find date
SELECT orderdate AS ordermonth, count(ordernumber)
FROM "alanparadise/cm"."orders"
WHERE  orderdate like('%2004%')
GROUP BY ordermonth ORDER BY 2 desc limit 1;
--Used that month
SELECT 'November' AS ordermonth, count(ordernumber)
FROM "alanparadise/cm"."orders"
WHERE  orderdate like('%2004%')
GROUP BY ordermonth ORDER BY 2 desc limit 1;

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

```sql
select distinct e.firstname, e.lastname
from "alanparadise/cm"."Customers" as c,
"alanparadise/cm"."employees" as e
where c.salesrepemployeenumber is null
and e.jobtitle = 'Sales Rep';

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

select customername
from "alanparadise/cm"."Customers" as c
left join "alanparadise/cm"."orders" o on c.customernumber = o.customernumber
where o.customernumber is null
and c.country = 'Switzerland';

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

select distinct c.customername, sum(d.quantityOrdered) as totalquantity
from "alanparadise/cm"."Customers" as c
left join "alanparadise/cm"."orders" as o
on c.customerNumber = o.customerNumber
left join "alanparadise/cm"."orderdetails" as d
on o.ordernumber = d.ordernumber
group by c.customername
having sum(d.quantityOrdered) > 1650;

            --Completed Part One--
--=====================================================--
    -- Part Two: Query Problems Using demo_repo
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-- 2.2  Queries using your demo_repo
-- 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.
create table TopCustomers(
  --CustomerNumber (integer), ContactDate (DATE) and  OrderTotal (a real number.)  None of
these columns can be NULL.
  CustomerNumber int not null,
  ContactDate date not null,
  OrderTotal real not 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 )
insert into TopCustomers
values
  (100, Now(), 150000),
```

```
  (101, Now(), 160000),
  (102, Now(), 170000),
  (103, Now(), 180000),
  (104, Now(), 160000),
  (105, Now(), 170000),
  (106, Now(), 180000),
  (107, Now(), 260000),
  (108, Now(), 270000),
  (109, Now(), 280000),
  (110, Now(), 160500),
  (111, Now(), 170600),
  (112, Now(), 180900);
-- 3. List the contents of the TopCustomers table in descending OrderTotal sequence. (10)
select
  *
from
  TopCustomers
order by
  OrderTotal desc;
-- 4. Add a new column to the TopCustomers table called OrderCount (integer).
ALTER TABLE
  TopCustomers
ADD
  OrderCount int;
-- 5. Update the Top Customers table, setting the OrderCount to a random number between 1 and
10.  Hint:  use (RANDOM() *10)
update
  TopCustomers
set
  OrderCount = floor(
    random() * 10 + 1
  ):: int;
-- 6. List the contents of the TopCustomers table in descending OrderCount sequence. (10
rows)
select
  *
from
  TopCustomers
order by
  OrderCount desc;
-- 7. Drop the TopCustomers table. (no answer set)
DROP
  Table TopCustomers;

--=====================================================--
            --Completed Part Two--
--=====================================================--
```