Comp1168 LabNo7

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- Q1

```sql
-- Q1
    -- use ap;
    -- show tables;
    -- select * from ap.invoices;
     select * from ap.vendors;
-- A
SELECT
    COUNT(*) AS No_of_Payment,
    SUM(payment_total) AS Total_Payment_Amount,
    AVG(payment_total) AS AverageAmount,
    round(Min(payment_total), 2) AS MinimumPayment,
    round(MAX(payment_total), 2) AS MaximumPayment
FROM    ap.invoices
WHERE   payment_total > 0;
```

```sql
-- B
SELECT
    av.vendor_id,
    av.vendor_name,
    COUNT(*) AS No_of_Payment,
    SUM(payment_total) AS Total_Payment_Amount,
    AVG(payment_total) AS AverageAmount,
    Min(payment_total) AS MinimumPayment,
    MAX(payment_total) AS MaximumPayment
FROM    ap.invoices ai
inner join ap.vendors av
on ai.vendor_id = av.vendor_id
WHERE
    payment_total > 0
Group by av.vendor_id
order by av.vendor_id ASC;
```

- Q2

```sql
-- Q2
select
    av.Vendor_state As State,
    count(distinct av.vendor_id)As TotalVendors,
    Sum(ai.payment_total) As TotalPayments
from ap.vendors av
inner join ap.invoices ai
on av.vendor_id = ai.vendor_id
Group by State;
```

```sql
-- Q2a
select
    av.Vendor_state As State,
    av.vendor_city As City,
    av.vendor_zip_code As ZipCode,
    count(distinct av.vendor_id)As TotalVendors,
    Sum(ai.invoice_total) As InvoicedAmt
from ap.vendors av
inner join ap.invoices ai
on av.vendor_id = ai.vendor_id
Group by av.vendor_state, av.vendor_city, av.vendor_zip_code
order by State;
```

■ Q3

```sql
-- Q3
-- select * from om.items;
SELECT
    CONCAT(c.customer_last_name, ', ', c.customer_first_name) AS customer_name,
    o.order_date,
    COUNT(*) AS  No_of_Orders_placed,
    Sum(i.unit_price) As OrderTotalAmt
FROM om.customers c
INNER JOIN om.orders o ON c.customer_id = o.customer_id
INNER JOIN om.order_details od ON od.order_id = o.order_id
INNER JOIN om.items i ON i.item_id = od.item_id
GROUP BY customer_name, o.order_date
HAVING COUNT(*) > 1;
```

■ Q4

```sql
-- Q4
    -- use ex;
    -- Show tables;
    -- select * from ex.departments;
    -- select * from ex.employees;
select
    department_name,
    count(*) As No_of_Employees
from ex.departments d
inner join ex.employees e
on e.department_number = d.department_number
Group by department_name
order by department_name;
```

```sql
-- Q4a
select
    ifnull(department_name, 'Total = '),
    count(*) As No_of_Employees
from ex.departments d
inner join ex.employees e
on e.department_number = d.department_number
Group by department_name with rollup;
```