Comp1168 LabNo07

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Question1

a)

USE ap;

SELECT v.vendor_id, v.vendor_name, i.invoice_date, i.invoice_total

FROM vendors v, invoices i

WHERE v.vendor_id = i.vendor_id;

b)

USE ap;

SELECT v.vendor_id, v.vendor_name, i.invoice_date, i.invoice_total

FROM vendors v

INNER JOIN invoices i ON v.vendor_id = i.vendor_id;

c)

USE ap;

SELECT v.vendor_id, v.vendor_name, i.invoice_date, i.invoice_total

FROM vendors v

JOIN invoices i USING (vendor_id);

d)

USE ap;

SELECT vendor_id, vendor_name, invoice_date, invoice_total

FROM vendors

NATURAL JOIN invoices;

Question2

USE ex;

SELECT e.employee_id, CONCAT(e.first_name, ' ', e.last_name) AS full_name, d.department_name

FROM employees e

INNER JOIN departments d ON e.department_number = d.department_number;

Question3

a)
SELECT

   e.employee_id,

   CONCAT(e.first_name, ' ', e.last_name) AS EmployeeName,

   d.department_name

FROM

   ex.employees e

LEFT JOIN ex.departments d ON e.department_number = d.department_number;

b)

```sql
SELECT
    e.employee_id,
    CONCAT(e.first_name, ' ', e.last_name) AS EmployeeName,
    d.department_name
FROM
    ex.departments d
RIGHT JOIN ex.employees e ON d.department_number = e.department_number;
```

c)

```sql
SELECT
    e.employee_id,
    CONCAT(e.first_name, ' ', e.last_name) AS EmployeeName,
    d.department_name
FROM
    ex.employees e
LEFT JOIN ex.departments d ON e.department_number = d.department_number
WHERE d.department_name IS NULL;
```

d)

```sql
SELECT
    e.employee_id,
    CONCAT(e.first_name, ' ', e.last_name) AS EmployeeName,
    d.department_name
```

```
FROM
    ex.employees e
LEFT JOIN ex.departments d ON e.department_number = d.department_number
UNION
SELECT
    e.employee_id,
    CONCAT(e.first_name, ' ', e.last_name) AS EmployeeName,
    d.department_name
FROM
    ex.departments d
LEFT JOIN ex.employees e ON d.department_number = e.department_number;
```

Question4

```
SELECT
    c.customer_zip,
    CONCAT(c.customer_first_name, ' ', c.customer_last_name) AS CustomerName,
    v.vendor_name
FROM
    ap.vendors v
INNER JOIN
    om.customers c
ON
    c.customer_zip = v.vendor_zip_code;
```

Question5

USE om;

SELECT

   CONCAT(c.customer_first_name, ' ', c.customer_last_name) AS CustomerName,

   o.order_id,

   p.title,

   o.order_date,

   od.order_qty,

   p.unit_price,

   (od.order_qty * p.unit_price) AS Total

FROM

   Customers c

JOIN Orders o ON c.customer_id = o.customer_id

JOIN order_details od ON o.order_id = od.order_id

JOIN items p ON od.item_id = p.item_id

ORDER BY CustomerName ASC;