

Assignment 02

Database Management Systems

01.

```
SELECT DISTINCT customer_id FROM Orders;
```

02.

```
SELECT DISTINCT customer_id FROM Orders WHERE YEAR(order_date) = 2008;
```

03.

```
SELECT DISTINCT customer_id FROM Orders WHERE YEAR(order_date) = 2008 AND MONTH(order_date) IN (4, 5, 6);
```

04.

```
SELECT DISTINCT customer_id FROM Orders WHERE order_date BETWEEN '2008-01-01' AND '2008-04-30';
```

05.

```
SELECT customer_id, COUNT(order_id) AS order_count FROM Orders WHERE YEAR(order_date) = 2008 GROUP BY customer_id;
```

06.

```
SELECT province, COUNT(order_id) AS order_count FROM Orders o JOIN Customers c ON o.customer_id = c.customer_id GROUP BY province;
```

07.

```
SELECT customer_id, SUM(quantity) AS total_items FROM Order_Items GROUP BY customer_id;
```

08.

```
SELECT item_id, SUM(quantity) AS total_quantity FROM Order_Items GROUP BY item_id ORDER BY total_quantity DESC LIMIT 10;
```

09.

```
SELECT oi.item_id, SUM(oi.quantity) AS total_quantity FROM Order_Items oi
JOIN Orders o ON oi.order_id = o.order_id
JOIN Customers c ON o.customer_id = c.customer_id
WHERE MONTH(o.order_date) = 4 AND YEAR(o.order_date) = 2008 AND c.province = 'Western'
GROUP BY oi.item_id
ORDER BY total_quantity DESC
LIMIT 10;
```

10.

```
SELECT order_id, SUM(quantity * price) AS total_income FROM Order_Items GROUP BY order_id;
```

11.

```
SELECT o.order_id, SUM(oi.quantity * oi.price) AS total_income FROM Orders o
JOIN Order_Items oi ON o.order_id = oi.order_id
WHERE MONTH(o.order_date) = 4 AND YEAR(o.order_date) = 2008
GROUP BY o.order_id;
```

12.

```
SELECT o.customer_id, SUM(oi.quantity * oi.price) AS total_income FROM Orders o
JOIN Order_Items oi ON o.order_id = oi.order_id
WHERE YEAR(o.order_date) = 2008
GROUP BY o.customer_id;
```

13.

```
SELECT o.customer_id, SUM(oi.quantity * oi.price) AS total_income FROM Orders o
JOIN Order_Items oi ON o.order_id = oi.order_id
JOIN Customers c ON o.customer_id = c.customer_id
WHERE YEAR(o.order_date) = 2008 AND c.age > 50
GROUP BY o.customer_id;
```