

Q.1 Find the purchase with the latest purchase date in the 'Purchases' table.

```
SELECT * FROM Purchases
```

```
ORDER BY PurchaseDate
```

```
DESC LIMIT 1;
```

	id	Supplier_id	Product_id	NumberReceived	PurchaseDate
	77	2	36	33	2035-10-09
	NULL	NULL	NULL	NULL	NULL

Q.2 Find the orders placed by "Mr. Rohit Kesavan Malhotra.

```
SELECT * FROM orders
```

```
WHERE First_Name = 'Rohit'
```

```
AND Middle_Name = 'Kesavan'
```

```
AND Last_Name = 'Malhotra'
```

```
AND title = 'Mr';
```

	id	title	First_Name	Middle_Name	Last_Name	Product_id	NumberShipped	OrderDate
	1	Mr	Rohit	Kesavan	Malhotra	1	19	2005-07-10
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Q.3 How many records are there in the 'suppliers' table?

```
SELECT COUNT(*) FROM suppliers;
```

COUNT(*)
5

Q.4 Find the number of products with a 'productlabels' ending with 'E.'

```
SELECT * FROM sales.products
```

```
WHERE productlabel LIKE 'E%';
```

id	productname	partnumber	productlabel	startingInventory	inventoryReceived	inventoryShipped	inventoryonHand	MinimumRequired
12	LENOVO	53456	EEF	18	9	4	18	10
25	DVD PLAYER	283456	EDEF	13	19	34	24	200
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Q.5 How many orders were placed in the year 2005?

```
SELECT COUNT(*) AS NumberOfOrders
```

```
FROM orders
```

```
WHERE YEAR(OrderDate) = 2005;
```

NumberOfOrders
7

Q.6 Find the total number of products purchased by each supplier.

```
SELECT s.supplier_name, COUNT(p.id) AS total_purchases
```

```
FROM suppliers s
```

```
LEFT JOIN Purchases p ON s.id = p.Supplier_id
```

```
GROUP BY s.supplier_name;
```

supplier_name	total_purchases
shockwave tech	16
CDW	16
Acme Tech	16
cloudTail	16
Alpha Seller	16

Q.7 Show the products that have not been ordered by any customer.

```
SELECT p.productname
FROM products p
LEFT JOIN orders o ON p.id = o.Product_id
WHERE o.Product_id IS NULL;
```

productname

Q.8 List the number of products received by each supplier and the corresponding supplier names.

```
SELECT s.supplier_name, SUM(p.NumberReceived) AS total_received
FROM suppliers s
LEFT JOIN Purchases p ON s.id = p.Supplier_id
GROUP BY s.supplier_name;
```

supplier_name	total_received
shockwave tech	752
CDW	810
Acme Tech	886
cloudTail	909
Alpha Seller	790

Q.9 Find the supplier with the most products purchased.

```
SELECT s.supplier_name, COUNT(p.id) AS total_purchases
FROM suppliers s
LEFT JOIN Purchases p ON s.id = p.Supplier_id
GROUP BY s.supplier_name
ORDER BY total_purchases DESC
LIMIT 1;
```

supplier_name	total_purchases
shockwave tech	16

Q.10 lists all orders with customer names (First Name and Last Name) and the associated product names.

```
SELECT o.id, o.First_Name, o.Last_Name, p.productname
FROM orders o
INNER JOIN products p
ON o.Product_id = p.id
LIMIT 10;
```

id	First_Name	Last_Name	productname
1	Rohit	Malhotra	APPLE
2	Vivaan	Malhotra	GOOGLE
3	Vivaan	Chauhan	ONEPLUS
4	Reyansh	Khanna	XIAOMI
5	Ishita	Gupta	REALME
6	Avani	Verma	AUSU
7	Aanya	Chauhan	MOTOROLA
8	Dev	Das	OPPO
9	Kabir	Jain	VIVO
10	Ishaan	Mishra	HUAWEI

Q.11 lists orders for a specific product ("APPLE").

```
SELECT o.id, o.First_Name, o.Last_Name
```

```
FROM orders o
```

```
JOIN products p ON o.Product_id = p.id
```

```
WHERE p.productname = 'APPLE';
```

id	First_Name	Last_Name
1	Rohit	Malhotra

Q.12 List the names of suppliers who have made purchases.

```
SELECT DISTINCT s.supplier_name
```

```
FROM suppliers s
```

```
JOIN Purchases p ON s.id = p.Supplier_id;
```

supplier_name
shockwave tech
CDW
Acme Tech
cloudTail
Alpha Seller

Q.13 Show the customers who have made purchases, along with the titles of the customers and the names of the products they ordered.

```
SELECT CONCAT(o.title, ' ', o.First_Name, ' ', o.Middle_Name, ' ', o.Last_Name)
```

```
AS customer_name, p.productname
```

```
FROM orders o
```

```
JOIN products p ON o.Product_id = p.id
```

```
LIMIT 5;
```

customer_name	productname
Mr Rohit Kesavan Malhotra	APPLE
Mr Vivaan Kesavan Malhotra	GOOGLE
Ms Vivaan Nanak Chauhan	ONEPLUS
Mr Reyansh Rajendra Khanna	XIAOMI
Ms Ishita Vishnu Gupta	REALME

Q.14 Find the supplier with the most products purchased.

```
SELECT s.supplier_name, COUNT(p.id) AS total_purchases
```

```
FROM suppliers s
```

```
LEFT JOIN Purchases p ON s.id = p.Supplier_id
```

```
GROUP BY s.supplier_name
```

```
ORDER BY total_purchases DESC
```

```
LIMIT 1;
```

supplier_name	total_purchases
shockwave tech	16

Q.15 Identifies the supplier who supplied the most items.

```
SELECT s.supplier_name, SUM(pu.NumberReceived) AS TotalItemsReceived
FROM suppliers s
LEFT JOIN Purchases pu ON s.id = pu.Supplier_id
GROUP BY s.supplier_name
ORDER BY TotalItemsReceived DESC
LIMIT 1;
```

supplier_name	TotalItemsReceiv...
cloudTail	909

Q.16 Show the customers who have made purchases, along with the products they ordered and the purchase dates, sorted by the purchase date in ascending order.

```
SELECT CONCAT(o.First_Name, ' ', o.Middle_Name, ' ', o.Last_Name) AS customer_name,
p.productname, o.OrderDate
FROM orders o
JOIN products p ON o.Product_id = p.id
ORDER BY o.OrderDate ASC
LIMIT 1;
```

customer_name	productname	OrderDate
Vihaan Haridas Agarwal	PRINTER	2000-01-16