1. Every SQL query must include SELECT and FROM

SELECT CustomerName, Country

FROM Customers;

1. DISTINCT keyword is used to extract different values

SELECT Distinct Country

FROM Customers;

1. COUNT function is used to count number of rows

SELECT COUNT(Distinct Country )

FROM Customers;

1. Use WHERE clause to filter data

SELECT \*

FROM Customers

WHERE Country = “UK”;

1. Use AND and OR Operator to write multiple conditions to filter

SELECT \* FROM Customers

WHERE Country = 'Germany' AND City = 'Berlin';

While using AND operator both conditions must be met to return results

While using OR operator one of the conditions must be met to return results

1. To sort results in SQL, use ORDER BY

SELECT \* FROM Customers

ORDER BY Country;

Use DESC to sort in descending order

SELECT ProductName, Price FROM Products

ORDER BY Price DESC;

While sorting results by multiple columns, separate them by ,

SELECT \* FROM Customers  
ORDER BY Country, CustomerName;

1. Use LIMIT Clause to return specific number of records

SELECT \* FROM Customers

WHERE Country='Germany'

LIMIT 3;

1. There are different aggregate functions in MySQL

SELECT MIN(Price) as LowestPrice

FROM Products;

-- as means aliasing your result set

SELECT MAX(Price) as HighestPrice

FROM Products;

select min(orderdate) from orders;

select min(productname) from products;

select max(productname) from products;

-- number of products in products table

SELECT COUNT(ProductID)

FROM Products;

-- Average product price

SELECT AVG(Price)

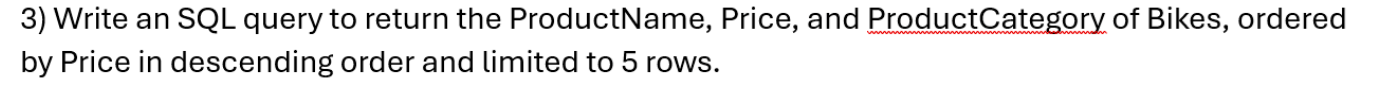
FROM Products;

SELECT round(AVG(Price),2)

FROM Products;

SELECT SUM(Quantity)

FROM Order\_Details;

1. How to approach writing queries
2. start writing select and from keywords
3. Write the name of the table
4. Do I need to use where clause ? Filtering
5. Do I need to use sorting ? Order by
6. What fields to return?
7. Is there need to limit?

SELECT ProductName, Price, ProductCategory

FROM Products

Where ProductCategory = “Bikes”

Order by Price DESC

LIMIT 5;

1. Like operator is used after where clause to search for a pattern.

% represents 0, 1 or multiple characters

\_ represents single character

ELECT \* FROM Customers

WHERE CustomerName LIKE 'a%';

-- ending with a

SELECT \* FROM Customers

WHERE CustomerName LIKE "%a";

SELECT \* FROM Customers

WHERE CustomerName LIKE "ma%";

SELECT \* FROM Customers

WHERE CustomerName LIKE '%or%';

-- Customer name including food

SELECT \* FROM Customers

WHERE CustomerName LIKE '%food%';

SELECT \* FROM Customers

WHERE CustomerName LIKE '%cheese%';

-- r in second position

SELECT \* FROM Customers

WHERE CustomerName LIKE '\_r%';

-- r in second position

SELECT \* FROM Customers

WHERE CustomerName LIKE '\_t%';

SELECT \* FROM Customers

WHERE CustomerName LIKE 'a\_\_%';

SELECT \* FROM Customers

WHERE ContactName LIKE 'a%o';

1. In operator is used in where clause for multiple or conditions.

SELECT \* FROM Customers  
WHERE Country IN ('Germany', 'France', 'UK');

SELECT \* FROM Customers

WHERE Country NOT IN ('Germany', 'France', 'UK');

1. The BETWEEN operator selects values within a given range. The values can be numbers, text, or dates.

SELECT \* FROM Products

WHERE Price NOT BETWEEN 10 AND 20;

select \* from products

where productname between "Konbu" and "Tofu";

SELECT \* FROM Orders

WHERE OrderDate BETWEEN '1996-07-01' AND '1996-07-31';