SQL 寫法

- **順序寫法**

SELECT “欄位名稱” FROM “表格名稱”
WHERE “條件式”
ORDER BY “欄位名稱” [ASC, DESC]
GROUP BY “欄位名稱”
HAVING “函數條件”

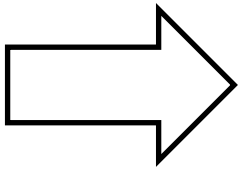
ASC - 從小到大
DESC - 從大到小

SQL AND OR

- 寫法：

```
SELECT "欄位名"
FROM "表格名"
WHERE "簡單條件"
{[AND|OR] "簡單條件"}+;
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name
Los Angeles
Los Angeles

程式碼：

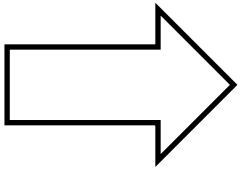
```
SELECT Store_Name FROM store_information
WHERE Sales > 1000 OR (Sales BETWEEN 275 AND 500)
```

SQL IN

- 寫法：

```
SELECT "欄位名"
FROM "表格名"
WHERE "簡單條件"
{[AND|OR] "簡單條件"}+;
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08

程式碼：

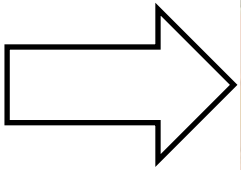
```
SELECT * FROM `store_information`
WHERE Store_Name IN ("Los Angeles", "San Diego")
```

SQL BETWEEN

- 寫法：

```
SELECT "欄位名"
FROM "表格名"
WHERE "欄位名" BETWEEN '值一' AND '值二';
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08

程式碼：

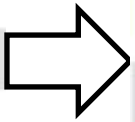
```
SELECT * FROM `store_information`
WHERE Txn_Date BETWEEN "2019-10-06" AND "2019-10-08"
```

SQL LIKE

- 寫法：

```
SELECT "欄位名"
FROM "表格名"
WHERE "欄位名" LIKE {模式};
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08

程式碼：

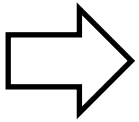
```
SELECT * FROM `store_information`
WHERE Store_Name LIKE "%AN%"
```

SQL ORDER BY

- 寫法：

```
SELECT "欄位名"
FROM "表格名"
[WHERE "條件"]
ORDER BY "欄位名" [ASC, DESC];
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name	Sales ▼ 1	Txn_Date
Los Angeles	1500	2019-10-05
Boston	700	2019-10-08
Los Angeles	300	2019-10-08
San Diego	250	2019-10-07

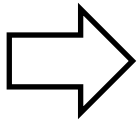
程式碼：

```
SELECT Store_Name, Sales, Txn_Date FROM `store_information`
ORDER BY Sales DESC
```

SQL AVG()函數 + Example

- 計算平均值

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



AVG(Sales)
687.5000

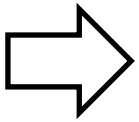
程式碼：

```
SELECT AVG(Sales) FROM `store_information`
```

SQL An Example

- COUNT( ) 函數,Sales > 700

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



COUNT(Store_Name)
1

程式碼：

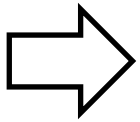
```
SELECT COUNT(Store_Name) FROM `store_information`
WHERE (Store_Name IS NOT NULL) AND Sales > 700
```

SQL COUNT( )函數

- 寫法：

```
SELECT COUNT("欄位名")
FROM "表格名";
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



COUNT(Store_Name)
4

程式碼：

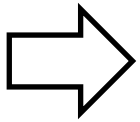
```
SELECT COUNT(Store_Name) FROM `store_information`
```

SQL MAX()函數 + Example

- 寫法：

```
SELECT MAX ("欄位名")
FROM "表格名";
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



MAX(Sales)
1500

程式碼：

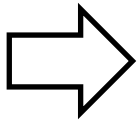
```
SELECT MAX(Sales) FROM `store_information`
```

SQL MIN()函數 + Example

- 寫法：

```
SELECT MIN ("欄位名")
FROM "表格名";
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



MIN(Sales)
250

程式碼：

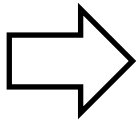
```
SELECT MIN(Sales) FROM `store_information`
```

SQL SUM()函數 + Example

- 寫法：

```
SELECT SUM ("欄位名")
FROM "表格名";
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



SUM(Sales)
2750

程式碼：

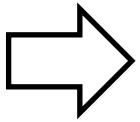
```
SELECT SUM(Sales) FROM `store_information`
```

SQL GROUP BY

- 寫法：

```
SELECT "欄位1", SUM("欄位2")
FROM "表格名"
GROUP BY "欄位1";
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name	SUM(Sales)
Boston	700
Los Angeles	1800
San Diego	250

程式碼：

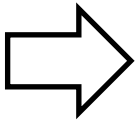
```
SELECT Store_Name, SUM(Sales) FROM `store_information`
GROUP BY Store_Name
```

SQL HAVING

- 寫法：

```
SELECT "欄位1", SUM("欄位2")
FROM "表格名"
GROUP BY "欄位1"
HAVING (函數條件);
```

Store_Name	Sales	Txn_Date
Los Angeles	1500	2019-10-05
San Diego	250	2019-10-07
Los Angeles	300	2019-10-08
Boston	700	2019-10-08



Store_Name	SUM(Sales)
Los Angeles	1800

程式碼：

```
SELECT Store_Name, SUM(Sales) FROM `store_information`
GROUP BY Store_Name
HAVING SUM(Sales) > 1500
```