# 資料庫概論　資圖系資圖（日）3B　各週作業

* 組別：04
* 組員：
  + 409440335　宋建章
  + 411006025　曾家悅
  + 412007204　陳宣瑋
  + 412657032　楊雅愉

近端: 127.0.0.1/phpMyAdmin 帳號:root 密碼:

遠端:163.13.175.8/phpMyAdmin 帳號:113dbb04 密碼:1763-1176

作業網站:163.13.175.8/113dbb/113dbb20

## 目次

[目次 2](#_Toc180155895)

[2024-09-20：作業01 4](#_Toc180155896)

[作業說明 4](#_Toc180155897)

[資料庫主題 4](#_Toc180155898)

[參考資料 4](#_Toc180155899)

[資料表綱要（database table schema） 7](#_Toc180155900)

[實體關係圖（entity relation diagram，ERD） 9](#_Toc180155901)

[2024-09-27：作業02 10](#_Toc180155902)

[作業說明 10](#_Toc180155903)

[SQL指令 10](#_Toc180155904)

[截圖 12](#_Toc180155905)

[2024-10-04：作業03 13](#_Toc180155906)

[作業說明 13](#_Toc180155907)

[部分資料 13](#_Toc180155908)

[SQL指令 16](#_Toc180155909)

[截圖 16](#_Toc180155910)

[2024-10-11：作業04 17](#_Toc180155911)

[作業說明 17](#_Toc180155912)

[作業04-01 SQL指令 17](#_Toc180155913)

[作業04-01截圖 18](#_Toc180155914)

[作業04-02 SQL指令 18](#_Toc180155915)

[作業04-02截圖 19](#_Toc180155916)

[作業04-03 SQL指令 19](#_Toc180155917)

[作業04-03截圖 20](#_Toc180155918)

[2024-10-18：作業05 21](#_Toc180155919)

[作業說明 21](#_Toc180155920)

## 2024-09-20：作業01

### 作業說明

各組選定資料庫主題，並寫出各個資料表綱要（schema），並繪製成個體關係圖（ERD）。

### 資料庫主題

金融服務統計資料庫。

### 參考資料

* <https://survey.banking.gov.tw/statis/webMain.aspx?sys=100&funid=allmenu>
* <https://hackmd.io/@investing/SkEbnGLwK>



一張含有 文字, 螢幕擷取畫面, 數字, 字型 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 數字 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 數字 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 軟體, 數字 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 數字, 軟體 的圖片

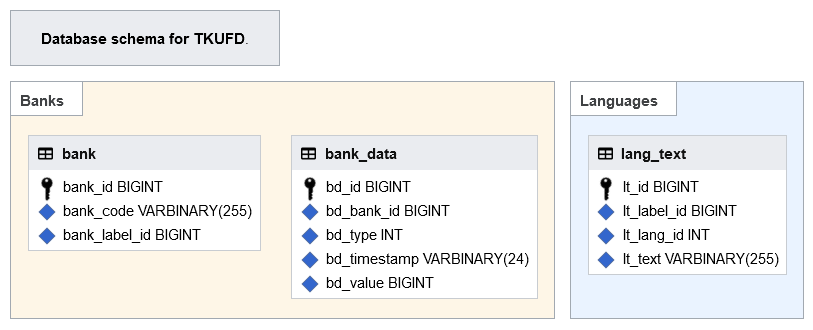
自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 行 的圖片

自動產生的描述

### 資料表綱要（database table schema）

圖片：



MySQL >= 8.0 / MariaDB >= 6.1：

|  |
| --- |
| **DATABASE** **DEFAULT** CHARACTER SET=utf8mb4 DEFAULT COLLATE=utf8mb4\_unicode\_ci;  **TABLE** bank (  bank\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bank\_code VARBINARY(255) **NOT** **NULL**,  bank\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bank\_code (bank\_code),  **PRIMARY** **KEY** (bank\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **TABLE** bank\_data (  bd\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bd\_bank\_id BIGINT UNSIGNED **NOT** **NULL**,  bd\_type INT UNSIGNED **NOT** **NULL**,  bd\_timestamp VARBINARY(24) **NOT** **NULL**,  bd\_value BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bd\_bid\_type\_timestamp (bd\_bank\_id, bd\_type, bd\_timestamp),  **PRIMARY** **KEY** (bd\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **TABLE** lang\_text (  lt\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  lt\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  lt\_lang\_id INT UNSIGNED **NOT** **NULL**,  lt\_text VARBINARY(255) **NOT** **NULL**,  **INDEX** lt\_label\_lang (lt\_label\_id, lt\_lang\_id),  **PRIMARY** **KEY** (lt\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary; |

MySQL < 8.0 / MariaDB < 6.1：

|  |
| --- |
| **DATABASE** **DEFAULT** CHARACTER SET=utf8 DEFAULT COLLATE=utf8\_unicode\_ci;  **TABLE** bank (  bank\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bank\_code VARBINARY(255) **NOT** **NULL**,  bank\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bank\_code (bank\_code),  **PRIMARY** **KEY** (bank\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **TABLE** bank\_data (  bd\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bd\_bank\_id BIGINT UNSIGNED **NOT** **NULL**,  bd\_type INT UNSIGNED **NOT** **NULL**,  bd\_timestamp VARBINARY(24) **NOT** **NULL**,  bd\_value BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bd\_bid\_type\_timestamp (bd\_bank\_id, bd\_type, bd\_timestamp),  **PRIMARY** **KEY** (bd\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **TABLE** lang\_text (  lt\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  lt\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  lt\_lang\_id INT UNSIGNED **NOT** **NULL**,  lt\_text VARBINARY(255) **NOT** **NULL**,  **INDEX** lt\_label\_lang (lt\_label\_id, lt\_lang\_id),  **PRIMARY** **KEY** (lt\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary; |

### 實體關係圖（entity relation diagram，ERD）

一張含有 文字, 圖表, 圓形, 字型 的圖片

自動產生的描述

## 2024-09-27：作業02

### 作業說明

依據ER圖，以SQL語法建立資料庫與資料表。須附SQL指令及完成截圖。

### SQL指令

MySQL >= 8.0 / MariaDB >= 6.1：

|  |
| --- |
| **CREATE** **DATABASE** tkufd **DEFAULT** CHARACTER SET=utf8mb4 DEFAULT COLLATE=utf8mb4\_unicode\_ci;  **USE** tkufd;  **CREATE** **TABLE** bank (  bank\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bank\_code VARBINARY(255) **NOT** **NULL**,  bank\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bank\_code (bank\_code),  **PRIMARY** **KEY** (bank\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **CREATE** **TABLE** bank\_data (  bd\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bd\_bank\_id BIGINT UNSIGNED **NOT** **NULL**,  bd\_type INT UNSIGNED **NOT** **NULL**,  bd\_timestamp VARBINARY(24) **NOT** **NULL**,  bd\_value BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bd\_bid\_type\_timestamp (bd\_bank\_id, bd\_type, bd\_timestamp),  **PRIMARY** **KEY** (bd\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **CREATE** **TABLE** lang\_text (  lt\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  lt\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  lt\_lang\_id INT UNSIGNED **NOT** **NULL**,  lt\_text VARBINARY(255) **NOT** **NULL**,  **INDEX** lt\_label\_lang (lt\_label\_id, lt\_lang\_id),  **PRIMARY** **KEY** (lt\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary; |

MySQL < 8.0 / MariaDB < 6.1：

|  |
| --- |
| **CREATE** **DATABASE** tkufd **DEFAULT** CHARACTER SET=utf8 DEFAULT COLLATE=utf8\_unicode\_ci;  **USE** tkufd;  **CREATE** **TABLE** bank (  bank\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bank\_code VARBINARY(255) **NOT** **NULL**,  bank\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bank\_code (bank\_code),  **PRIMARY** **KEY** (bank\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **CREATE** **TABLE** bank\_data (  bd\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bd\_bank\_id BIGINT UNSIGNED **NOT** **NULL**,  bd\_type INT UNSIGNED **NOT** **NULL**,  bd\_timestamp VARBINARY(24) **NOT** **NULL**,  bd\_value BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bd\_bid\_type\_timestamp (bd\_bank\_id, bd\_type, bd\_timestamp),  **PRIMARY** **KEY** (bd\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **CREATE** **TABLE** lang\_text (  lt\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  lt\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  lt\_lang\_id INT UNSIGNED **NOT** **NULL**,  lt\_text VARBINARY(255) **NOT** **NULL**,  **INDEX** lt\_label\_lang (lt\_label\_id, lt\_lang\_id),  **PRIMARY** **KEY** (lt\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary; |

### 截圖

一張含有 文字, 螢幕擷取畫面, 軟體, 數字 的圖片

自動產生的描述

## 2024-10-04：作業03

### 作業說明

以SQL語法新增全部或部份資料。須交近端截圖。

### 部分資料

| **銀行 bank** | | |
| --- | --- | --- |
| **bank\_id** | **bank\_code** | **bank\_label\_id** |
| 1 | 004 | 1 |
| 2 | 012 | 2 |
| 3 | 013 | 3 |
| 4 | 017 | 4 |
| 5 | 021 | 5 |
| 6 | 048 | 6 |
| 7 | 052 | 7 |
| 8 | 806 | 8 |
| 9 | 807 | 9 |
| 10 | 808 | 10 |
| 11 | 809 | 11 |
| 12 | 810 | 12 |
| 13 | 810 | 13 |
| 14 | 822 | 14 |

| **銀行資料 bank\_data** | | | | |
| --- | --- | --- | --- | --- |
| **bd\_id** | **bd\_bank\_id** | **bd\_type** | **bd\_timestamp** | **bd\_value** |
| 1 | 1 | 1 | 2023 | 1558889 |
| 2 | 2 | 1 | 2023 | 1189926 |
| 3 | 3 | 1 | 2023 | 1817179 |
| 4 | 4 | 1 | 2023 | 960135 |
| 5 | 5 | 1 | 2023 | 162491 |
| 6 | 6 | 1 | 2023 | 36045 |
| 7 | 7 | 1 | 2023 | 241939 |
| 8 | 8 | 1 | 2023 | 797925 |
| 9 | 9 | 1 | 2023 | 797143 |
| 10 | 10 | 1 | 2023 | 1144109 |
| 11 | 11 | 1 | 2023 | 160396 |
| 12 | 12 | 1 | 2023 | 148198 |
| 13 | 13 | 1 | 2023 | 921354 |
| 14 | 14 | 1 | 2023 | 1163282 |

| **多語言文字 lang\_text** | | | |
| --- | --- | --- | --- |
| **lt\_id** | **lt\_label\_id** | **lt\_lang\_id** | **lt\_text** |
| 1 | 1 | 672 | 臺灣銀行 |
| 2 | 1 | 2 | Bank of Taiwan |
| 3 | 2 | 672 | 台北富邦商業銀行 |
| 4 | 2 | 2 | Taipei Fubon Commercial Bank |
| 5 | 3 | 672 | 國泰世華商業銀行 |
| 6 | 3 | 2 | Cathay United Bank |
| 7 | 4 | 672 | 兆豐國際商業銀行 |
| 8 | 4 | 2 | Mega International Commercial Bank |
| 9 | 5 | 672 | 花旗（台灣）商業銀行 |
| 10 | 5 | 2 | Citibank (Taiwan) |
| 11 | 6 | 672 | 王道商業銀行 |
| 12 | 6 | 2 | O-Bank |
| 13 | 7 | 672 | 渣打國際商業銀行 |
| 14 | 7 | 2 | Standard Chartered |
| 15 | 8 | 672 | 元大商業銀行 |
| 16 | 8 | 2 | Yuanta Commercial Bank |
| 17 | 9 | 672 | 永豐商業銀行 |
| 18 | 9 | 2 | Bank SinoPac |
| 19 | 10 | 672 | 玉山商業銀行 |
| 20 | 10 | 2 | E.SUN Commercial Bank |
| 21 | 11 | 672 | 凱基商業銀行 |
| 22 | 11 | 2 | KGI Bank |
| 23 | 12 | 672 | 星展（台灣）商業銀行 |
| 24 | 12 | 2 | DBS Bank (Taiwan) |
| 25 | 13 | 672 | 台新國際商業銀行 |
| 26 | 13 | 2 | Taishin International Bank |
| 27 | 14 | 672 | 中國信託商業銀行 |
| 28 | 14 | 2 | CTBC Bank |

### SQL指令

|  |
| --- |
| **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (1, '004', 1);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (2, '012', 2);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (3, '013', 3);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (4, '017', 4);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (5, '021', 5);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (6, '048', 6);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (7, '052', 7);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (8, '806', 8);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (9, '807', 9);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (10, '808', 10);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (11, '809', 11);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (12, '810', 12);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (13, '810', 13);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (14, '822', 14);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (1, 1, 1, '2023', 1558889);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (2, 2, 1, '2023', 1189926);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (3, 3, 1, '2023', 1817179);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (4, 4, 1, '2023', 960135);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (5, 5, 1, '2023', 162491);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (6, 6, 1, '2023', 36045);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (7, 7, 1, '2023', 241939);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (8, 8, 1, '2023', 797925);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (9, 9, 1, '2023', 797143);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (10, 10, 1, '2023', 1144109);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (11, 11, 1, '2023', 160396);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (12, 12, 1, '2023', 148198);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (13, 13, 1, '2023', 921354);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (14, 14, 1, '2023', 1163282);  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (1, 1, 672, '臺灣銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (2, 1, 2, 'Bank of Taiwan');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (3, 2, 672, '台北富邦商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (4, 2, 2, 'Taipei Fubon Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (5, 3, 672, '國泰世華商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (6, 3, 2, 'Cathay United Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (7, 4, 672, '兆豐國際商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (8, 4, 2, 'Mega International Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (9, 5, 672, '花旗（台灣）商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (10, 5, 2, 'Citibank (Taiwan)');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (11, 6, 672, '王道商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (12, 6, 2, 'O-Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (13, 7, 672, '渣打國際商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (14, 7, 2, 'Standard Chartered');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (15, 8, 672, '元大商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (16, 8, 2, 'Yuanta Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (17, 9, 672, '永豐商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (18, 9, 2, 'Bank SinoPac');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (19, 10, 672, '玉山商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (20, 10, 2, 'E.SUN Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (21, 11, 672, '凱基商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (22, 11, 2, 'KGI Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (23, 12, 672, '星展（台灣）商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (24, 12, 2, 'DBS Bank (Taiwan)');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (25, 13, 672, '台新國際商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (26, 13, 2, 'Taishin International Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (27, 14, 672, '中國信託商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (28, 14, 2, 'CTBC Bank'); |

### 截圖

近端

一張含有 文字, 螢幕擷取畫面, 軟體, 電腦圖示 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 軟體, 電腦圖示 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 軟體, 數字 的圖片

自動產生的描述

遠端

一張含有 文字, 螢幕擷取畫面, 軟體, 數字 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 軟體, 網頁 的圖片

自動產生的描述

一張含有 文字, 電子產品, 螢幕擷取畫面, 軟體 的圖片

自動產生的描述

## 2024-10-11：作業04

### 作業說明

* 作業04-01：以SQL指令「在遠端」完成作業2、作業3。須附SQL及遠端截圖。
* 作業04-02：自行設定2~3個簡易查詢需求，並以SQL於近端查詢出來。須附SQL及近端截圖。
* 作業04-03：將資料庫和上述2~3個簡易查詢於遠端執行。須附SQL及遠端截圖。

### 作業04-01 SQL指令

遠端（MySQL < 8.0 / MariaDB < 6.1）：

|  |
| --- |
| **CREATE** **TABLE** bank (  bank\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bank\_code VARBINARY(255) **NOT** **NULL**,  bank\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bank\_code (bank\_code),  **PRIMARY** **KEY** (bank\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **CREATE** **TABLE** bank\_data (  bd\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  bd\_bank\_id BIGINT UNSIGNED **NOT** **NULL**,  bd\_type INT UNSIGNED **NOT** **NULL**,  bd\_timestamp VARBINARY(24) **NOT** **NULL**,  bd\_value BIGINT UNSIGNED **NOT** **NULL**,  **INDEX** bd\_bid\_type\_timestamp (bd\_bank\_id, bd\_type, bd\_timestamp),  **PRIMARY** **KEY** (bd\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **CREATE** **TABLE** lang\_text (  lt\_id BIGINT UNSIGNED AUTO\_INCREMENT **NOT** **NULL**,  lt\_label\_id BIGINT UNSIGNED **NOT** **NULL**,  lt\_lang\_id INT UNSIGNED **NOT** **NULL**,  lt\_text VARBINARY(255) **NOT** **NULL**,  **INDEX** lt\_label\_lang (lt\_label\_id, lt\_lang\_id),  **PRIMARY** **KEY** (lt\_id)  ) ENGINE=InnoDB, **DEFAULT** CHARSET=binary;  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (1, '004', 1);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (2, '012', 2);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (3, '013', 3);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (4, '017', 4);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (5, '021', 5);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (6, '048', 6);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (7, '052', 7);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (8, '806', 8);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (9, '807', 9);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (10, '808', 10);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (11, '809', 11);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (12, '810', 12);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (13, '810', 13);  **INSERT INTO** bank (bank\_id, bank\_code, bank\_label\_id) **VALUES** (14, '822', 14);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (1, 1, 1, '2023', 1558889);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (2, 2, 1, '2023', 1189926);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (3, 3, 1, '2023', 1817179);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (4, 4, 1, '2023', 960135);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (5, 5, 1, '2023', 162491);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (6, 6, 1, '2023', 36045);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (7, 7, 1, '2023', 241939);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (8, 8, 1, '2023', 797925);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (9, 9, 1, '2023', 797143);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (10, 10, 1, '2023', 1144109);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (11, 11, 1, '2023', 160396);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (12, 12, 1, '2023', 148198);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (13, 13, 1, '2023', 921354);  **INSERT INTO** bank\_data (bd\_id, bd\_bank\_id, bd\_type, bd\_timestamp, bd\_value) **VALUES** (14, 14, 1, '2023', 1163282);  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (1, 1, 672, '臺灣銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (2, 1, 2, 'Bank of Taiwan');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (3, 2, 672, '台北富邦商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (4, 2, 2, 'Taipei Fubon Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (5, 3, 672, '國泰世華商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (6, 3, 2, 'Cathay United Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (7, 4, 672, '兆豐國際商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (8, 4, 2, 'Mega International Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (9, 5, 672, '花旗（台灣）商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (10, 5, 2, 'Citibank (Taiwan)');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (11, 6, 672, '王道商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (12, 6, 2, 'O-Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (13, 7, 672, '渣打國際商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (14, 7, 2, 'Standard Chartered');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (15, 8, 672, '元大商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (16, 8, 2, 'Yuanta Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (17, 9, 672, '永豐商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (18, 9, 2, 'Bank SinoPac');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (19, 10, 672, '玉山商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (20, 10, 2, 'E.SUN Commercial Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (21, 11, 672, '凱基商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (22, 11, 2, 'KGI Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (23, 12, 672, '星展（台灣）商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (24, 12, 2, 'DBS Bank (Taiwan)');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (25, 13, 672, '台新國際商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (26, 13, 2, 'Taishin International Bank');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (27, 14, 672, '中國信託商業銀行');  **INSERT INTO** lang\_text (lt\_id, lt\_label\_id, lt\_lang\_id, lt\_text) **VALUES** (28, 14, 2, 'CTBC Bank'); |

### 作業04-01截圖

### 作業04-02 SQL指令

|  |
| --- |
| /\*簡易查詢\*/  在bank中找尋bank\_code為812的資料  SELECT \* FROM `bank` WHERE bank\_code =812  /\*2\*/  在bank\_data 中找bd\_timestamp為202312的資料  SELECT \* FROM `bank\_data` WHERE bd\_timestamp=202312  /\*3\*/  在lang\_text 中lang\_text變數中有銀行的資料  SELECT \* FROM `lang\_text` WHERE lt\_text like '%%銀行' |

### 作業04-02截圖

一張含有 文字, 螢幕擷取畫面, 軟體, 電腦圖示 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 軟體, 數字 的圖片

自動產生的描述

### 作業04-03 SQL指令

|  |
| --- |
| /\*簡易查詢\*/  在bank中找尋bank\_code為812的資料  SELECT \* FROM `bank` WHERE bank\_code =812  /\*2\*/  在bank\_data 中找bd\_timestamp為202312的資料  SELECT \* FROM `bank\_data` WHERE bd\_timestamp=202312  /\*3\*/  在lang\_text 中lang\_text變數中有銀行的資料  SELECT \* FROM `lang\_text` WHERE lt\_text like '%%銀行' |

### 作業04-03截圖

一張含有 文字, 螢幕擷取畫面, 軟體, 網頁 的圖片

自動產生的描述

一張含有 文字, 電子產品, 螢幕擷取畫面, 軟體 的圖片

自動產生的描述

## 2024-10-18：作業05

### 作業說明

* 作業05-01：設計網頁並以PHP程式查出「單一資料表」所有資料並輸出。須附PHP及近端截圖。
* 作業05-02：設計網頁並以PHP程式查出「單一資料表」所有資料並輸出。須附SQL及遠端截圖。

### PHP程式

|  |
| --- |
| <?php |

### 作業05-01近端截圖

### 作業05-02遠端截圖