1.請依照下列指定的情況，利用 SQL 指令完成要求：

(1)針對某一個出版社，列出該出版社的書籍總被購買數量

顯示第 0 - 0 列 (總計 1 筆, 查詢花費 0.0006 秒。)

```
1 SELECT P_name, SUM(OD_Count) as '總被購買數量'
2 FROM odetail, book, supplier
3 WHERE supplier.P_name = 'Apress' AND supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID
```

P_name	總被購買數量
Apress	2

1.取得「P_name (supplier)」跟「總購買數量 OD_Count(odetail)」資料

2.從 odetail, book, supplier 選取資料表

3.從「P_name」中找"Apress 資料&串聯 supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID

/

Code:

SELECT P_name, SUM(OD_Count) as '總被購買數量'

FROM odetail, book, supplier

WHERE supplier.P_name = 'Apress' AND supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID

(2)針對某一個出版社，列出該出版社名稱所有書籍，

並只顯示被購買數量大於 2 的書籍。最後以被購買數量由小到大排序。

P_name	B_name	被購買數量
OREILLY	Designing with Data	4

1.取得「P_name (supplier)」跟「被購買數量 OD_Count(odetail)」資料

2.從 odetail, book, supplier 選取資料表

3.從「supplier.P_name」中找" 'OREILLY'資料&串聯 supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID

4.設定條件為「被購買數量>2」

5.聯集第二個 table…

(5~最後)重複上列動作

/

Code

SELECT P_name, B_name, SUM(OD_Count) as '被購買數量'

FROM supplier, odetail, book

WHERE supplier.P_name='OREILLY' AND book.B_name='Designing with Data' AND supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID

HAVING 被購買數量>2

UNION

SELECT P_name, B_name, SUM(OD_Count) as '被購買數量'

FROM supplier, odetail, book

WHERE supplier.P_name='OREILLY' AND book.B_name='Programming iOS 13' AND supplier.P_ID =

book.P_ID AND book.B_ID = odetail.B_ID

HAVING 被購買數量>2

UNION

SELECT P_name, B_name, SUM(OD_Count) as '被購買數量'

FROM supplier, odetail, book

WHERE supplier.P_name='OREILLY' AND book.B_name='Azure Analytics' AND supplier.P_ID = book.P_ID

AND book.B_ID = odetail.B_ID

HAVING 被購買數量>2

(3)針對某一個出版社，列出該出版社名稱，以及其所有產品之被購買數量的總平均。

顯示第 0 - 0 列 (總計 1 筆, 查詢花費 0.0008 秒。)

```
1 SELECT P_name, SUM(OD_Count)/18 as '平均被購買數量'
2 FROM supplier, odetail, book
3 WHERE supplier.P_name = 'OREILLY' AND supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID
```

P_name	平均被購買數量
OREILLY	0.3889

1.取得「P_name (supplier)」跟「平均被購買數量 OD_Count/18 筆訂單」資料

2.從 odetail, book, supplier 選取資料表

3.從「P_name」中找” OREILLY”資料&串聯 supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID

/

Code

SELECT P_name, SUM(OD_Count)/18 as '平均被購買數量'

FROM supplier, odetail, book

WHERE supplier.P_name = 'OREILLY' AND supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID

(4)請列出所有會員資訊以及他們的總購買次數，並且依照次數由高到低排序。

O_ID	M_ID	M_Count	M_Amount	Date	M_ID	account	password	M_name	M_address	birthday	M_tel	總購買次數 ▼ 1
4	4	1	1386	2018-10-01	4	yun0004	pwd004	Kevin	No.4, Sec. 3, University Road, Douliu City, Yunlin...	1992-04-15	05-5555-5555	3
3	3	1	537	2018-10-01	3	yun0003	pwd003	Genie	No.3, Sec. 3, University Road, Douliu City, Yunlin...	1993-06-09	04-4444-4444	3
2	2	1	2533	2018-10-01	2	yun0002	pwd002	Tim	No.2, Sec. 3, University Road, Douliu City, Yunlin...	1955-10-15	03-3333-3333	3
1	1	1	458	2018-10-01	1	yun0001	pwd001	Cairns	No.1, Sec. 3, University Road, Douliu City, Yunlin...	1994-01-08	02-2222-2222	3
7	7	1	1201	2018-10-01	7	yun0007	pwd007	Jam	No.7, Sec. 3, University Road, Douliu City, Yunlin...	1978-05-08	08-8888-8888	1
6	6	1	1366	2018-10-01	6	yun0006	pwd006	Edwin	No.6, Sec. 3, University Road, Douliu City, Yunlin...	1990-10-25	07-7777-7777	1
5	5	1	1507	2018-10-01	5	yun0005	pwd005	Angela	No.5, Sec. 3, University Road, Douliu City, Yunlin...	1965-04-20	06-6666-6666	1
10	10	1	1050	2018-10-01	10	yun0010	pwd0010	Jane	No.10, Sec. 3, University Road, Douliu City, Yunli...	1988-10-10	05-5533-5555	1
9	9	1	199	2018-10-01	9	yun0009	pwd009	Jay	No.9, Sec. 3, University Road, Douliu City, Yunlin...	1991-11-11	03-3333-3344	1
8	8	1	1482	2018-10-01	8	yun0008	pwd008	Jacob	No.8, Sec. 3, University Road, Douliu City, Yunlin...	1990-08-08	02-2222-2233	1

1.取得所有會員及「總購買次數」資料

2.從 orderhistory,member 選取資料表

3.從「orderhistory.M_ID」中找” member.M_ID”資料&設定各會員 ID

4.聯集其他會員

(4~最後)重複上列動作

5.ORDER BY 總購買次數由高到低排序

/

Code:

```
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 1
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 2
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 3
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 4
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 5
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 6
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 7
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 8
UNION
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 9
UNION
```

```
SELECT *, COUNT(O_ID) AS '總購買次數'
FROM orderhistory,member
WHERE orderhistory.M_ID = member.M_ID AND member.M_ID = 10
ORDER BY  總購買次數  DESC
```

4.請依照下列指定的情況，利用 SQL 指令完成要求：

(1)請建立一視觀表(View)命名為「View_Order_Count」，顯示各出版社、其所有書籍名稱和各書籍被購買數量以及書籍的銷售總額。

顯示第 0 - ... 列 (查詢花費 0.0012 秒。)

```
SELECT * FROM `view order count`
```

P_name	B_name	被購買數量	OD_Amount
Apress	Applied Natural Language Processing with Python	1	1201
OREILLY	Azure Analytics	1	537
Cisco Systems	Building Scalable Cisco Networks	5	199
OREILLY	Designing with Data	4	458
Cisco Systems	Managing Cisco Network Security	1	1050
Packt Publ	Mastering PostgreSQL 11	1	1366
Packt Publ	Mastering Python for Networking and Security	1	1366
OREILLY	Programming iOS 13	2	2533
Packt Publ	Python Deep Learning Projects	1	1507
Apress	Python Descriptors	1	1482

1.建立一個檢視表(VIEW)名稱為 view_order_count

2.取得「P_name」「B_name」跟「被購買數量」跟「OD_Amount」資料

3.從 supplier, odetail, book 選取資料

4.設定條件為 supplier.P_ID = book.P_ID 跟 book.B_ID = odetail.B_ID

5.將 B_name 設為群組

/

Code:

```
CREATE view view_order_count AS
SELECT P_name, B_name, SUM(OD_Count) as '被購買數量', OD_Amount
FROM supplier, odetail, book
WHERE supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID
GROUP BY B_name
```

(2)將書籍” Programming iOS 12”之品名改為” Programming iOS 13”，並針對視觀表 View_Order_Count 查詢 OREILLY 出版社之所有書籍。

顯示第 0 - 2 列 (總計 3 筆, 查詢花費 0.0009 秒。)

```
1 SELECT P_name,B_name,被購買數量,OD_Amount
2 FROM View_Order_Count
3 WHERE P_name = 'OREILLY'
```

P_name	B_name	被購買數量	OD_Amount
OREILLY	Programming iOS 13	2	2533
OREILLY	Designing with Data	4	458
OREILLY	Azure Analytics	1	537

1.更新資料'Programming iOS 12'改為'Programming iOS 13'

2.取得「P_name」「B_name」跟「被購買數量」跟「OD_Amount」資料

3.從 View_Order_Count 選取資料

4. 設定條件為 P_name = 'OREILLY'

/

Code

```
UPDATE book SET B_name='Programming iOS 13' WHERE B_name='Programming iOS 12';
SELECT P_name,B_name,被購買數量,OD_Amount
FROM View_Order_Count
WHERE P_name = 'OREILLY'
```

(3)針對視觀表 View_Order_Count，查詢哪些出版社的銷售金額加總後，低於$5000，並顯示出版社名稱及總被購買次數及總金額

顯示第 0 - 3 列 (總計 4 筆, 查詢花費 0.0007 秒。)

```
1 SELECT P_name, SUM(OD_Count) AS '總被購買數量', (OD_Amount*SUM(OD_Count)) AS '銷售總額'
2 FROM supplier,odetail, book
3 WHERE supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID
4 GROUP BY P_name
5 HAVING 銷售總額 < 5000
```

P_name	總被購買數量	銷售總額
Apress	2	2402
Cisco Systems	6	1194
OREILLY	7	3206
Packt Publ	3	4098

1.取得「P_name」跟「總被購買數量」跟「銷售總額」資料

2.從 supplier,odetail, book 選取資料

3.設定條件為 supplier.P_ID = book.P_ID 跟 book.B_ID = odetail.B_ID

4.把 P_name 設為群組

5.將銷售總額 < 5000 設為條件

/

```
SELECT P_name, SUM(OD_Count) AS '總被購買數量', (OD_Amount*SUM(OD_Count)) AS '銷售總額'
FROM supplier,odetail, book
WHERE supplier.P_ID = book.P_ID AND book.B_ID = odetail.B_ID
GROUP BY P_name
HAVING 銷售總額 < 5000
```