

MySQL任务2作业参考答案

项目三 超过5名学生的课

```
1  -- 创建表
2  CREATE TABLE courses (
3      student VARCHAR(1) NOT NULL,
4      class   VARCHAR(255) NOT NULL
5  );
6
7
8  -- 插入数据
9  INSERT INTO courses VALUES('A','Math');
10 INSERT INTO courses VALUES('B','English');
11 INSERT INTO courses VALUES('C','Math');
12 INSERT INTO courses VALUES('D','Biology');
13 INSERT INTO courses VALUES('E','Math');
14 INSERT INTO courses VALUES('F','Computer');
15 INSERT INTO courses VALUES('G','Math');
16 INSERT INTO courses VALUES('H','Math');
17 INSERT INTO courses VALUES('I','Math');
18 INSERT INTO courses VALUES('A','Math');
19
20 -- 作业解答
21 SELECT class
22     FROM courses
23     GROUP BY class
24     HAVING COUNT(DISTINCT student) >= 5
```

项目四 交换工资

交换工资有个小坑，就是故意设置了一个重复的数据。所以需要进行去重处理再计数。

```
1  -- 创建表格
2  CREATE TABLE salary (
3      id      VARCHAR(2) NOT NULL PRIMARY KEY,
4      name    VARCHAR(50) NULL,
5      sex     VARCHAR(2) NOT NULL,
6      salary  INT         NULL);
7
8  -- 插入数据
9  INSERT INTO salary VALUES('1','A','m','2500');
10 INSERT INTO salary VALUES('2','B','f','1500');
11 INSERT INTO salary VALUES('3','C','m','5500');
12 INSERT INTO salary VALUES('4','D','f','500');
13
14 -- 作业参考答案
15 SELECT * FROM salary -- 初始表格
16
17 UPDATE salary
18     SET sex = CASE
19         WHEN sex = 'f' THEN 'm'
20         ELSE 'f'
21     END
22
23 SELECT * FROM salary -- 查看代码结果
```

项目五 有趣的电影

```

1  -- 创建表格
2  CREATE TABLE IF NOT EXISTS Person (
3  PersonID INT NOT NULL PRIMARY KEY,
4  FirstName VARCHAR(120),
5  LastName VARCHAR(120)
6  );
7
8  CREATE TABLE IF NOT EXISTS Address (
9  AddressID INT NOT NULL PRIMARY KEY,
10 PersonID INT NOT NULL,
11 City VARCHAR(100),
12 State VARCHAR(100)
13 );
14
15 -- 插入数据
16 INSERT INTO Person VALUES('1','A','B');
17 INSERT INTO Person VALUES('2','C','D');
18 INSERT INTO Person VALUES('3','E','F');
19
20 INSERT INTO Address VALUES('1','3','NAN JING','JIANG SU');
21 INSERT INTO Address VALUES('2','2','HANG ZHOU','ZHE JIANG');
22 INSERT INTO Address VALUES('3','1','GUANG ZHOU','GUANG DONG');
23
24 -- 作业
25 SELECT Person.FirstName
26        ,Person.LastName
27        ,Address.City
28        ,Address.State
29 FROM Person
30 LEFT JOIN Address
31 ON Person.PersonID = Address.PersonID

```

项目六 组合两张表

```

1  DELETE a.*
2  FROM email a, email b
3  WHERE a.Email = b.Email
4  AND a.ID > b.ID;
5
6  SELECT *
7  FROM email;

```

项目七：删除重复的邮箱

连接两张Person表，筛选出重复且Id较大的记录，然后删除。

```

1  DELETE p1 FROM Person AS p1
2  JOIN Person AS p2 ON p1.Email = p2.Email AND p1.Id > p2.Id;

```

项目八：从不订购的客户

可以输出id没有出现在Orders表格CustomerId字段中的客户名字：

```

1  SELECT Name AS Customers FROM Customers WHERE
2  Id NOT IN
   (SELECT CustomerId FROM Orders);

```

也可以把Customers表左连接（left join）Orders表，然后输出对应订单id为null的客户名字：

1	SELECT Name AS Customers FROM
2	Customers AS c
3	LEFT JOIN Orders AS o ON c.Id =
	o.CustomerId
	WHERE o.Id IS NULL;

项目九：超过经理收入的员工

连接（join）两张表，一个作为员工，一个作为上级。然后用WHERE找出符合条件的员工名字。

1	SELECT e.Name AS Employee FROM
2	Employee AS e
3	JOIN Employee AS m ON e.ManagerId = m.Id
	WHERE e.Salary > m.Salary;