1,切记不要在for循环中访问数据库，大忌

2,根据需求设计数据库

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| [***如何根据需求设计*最优的*数据库*表结构？**](https://www.zhihu.com/question/51824515/answer/127926948)  首先，没有最优。  如果是业务，第一阶段是实现逻辑。  字段名称一次到位，不要在多表里用不同的名称。尽量贴近业务模型，在一个业务窗口中，对应的表尽量是一个，而非多个。  在实现逻辑以后，是数据库优化。  拆分大表，慢sql，建立索引。  然后是工程阶段，memcache等 |

3，数据库表设计注意事项

1. 不同表关联的话，两表内表示同样数据的字段尽量名称一致；
2. 不要用复数；

4，外部无法链接Mysql的解决办法

使用Navicat连接MySQL数据库，如果在本机上通过ip地址输入localhost是可以连接上的。但是我们想要通过以太网IPv4地址远程连接的方式，就会提示Host 'DESKTOP-BNFMG64' is not allowed to connect to this MySQL server即MySQL不允许远程登录，所以远程登录失败了。

解决办法：

方案一，直接修改root权限（常用）：

1.通过cmd进入mysql，即输入命令mysql -u root -p 密码

2.使用mysql，即输入命令use mysql;

3.修改字段user为root一列的的host字段为%，update user set host = '%' where user = 'root';

4.刷新MySQL的系统权限相关表，即输入命令flush privileges;

方案二，创建一个新的用户user1，密码为123456：

1.输入命令create user user1 identified with mysql\_native\_password by '123456';

2.输入命令grant all on \*.\* to 'user1'@'%';

3.输入命令FLUSH PRIVILEGES;

5，多个表左外连接时，会造成数据重复

因为，一个表和下一个边左外链接后，会形成一个新表，再和下一个表进行链接，这是会形成笛卡尔积，例如，一个回收员对应的订单重复

* 正确写法

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| <select id="findDistrictOrder" resultType="RecycleOrder">  select ro.\*  from recycle\_order as ro  left join recycle\_address as ra on ro.address\_id = ra.id  where ra.district =  (select rs.district  from recycle\_buyer as rb  left join recycle\_station as rs on rb.station\_id = rs.id  where rb.id=#{buyerId})  <if test="orderType != null and orderType != ''">  and ro.order\_type = #{orderType}  </if>  order by ro.create\_time desc  </select> |

* 错误写法，会造成结果重复

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| <select id="findDistrictOrder" resultType="RecycleOrder">  SELECT  <include refid="orderSql"></include>,  CONCAT(ra.province,ra.city,ra.district,',',ra.addr) as orderAddress,ra.phone\_num as phoneNumber,ra.username,IFNULL(roc.collection\_type,'9') as collectionType  FROM recycle\_buyer as rb  left join recycle\_station as rs on rs.id = rb.station\_id  left join recycle\_address as ra on ra.district = rs.district  left join recycle\_order as o on ra.id = o.address\_id  left join recycle\_order\_collection as roc on roc.order\_id = o.id  where o.del\_flag = '0'  and rb.id=#{buyerId}  <if test="orderType != null and orderType != ''">  and o.order\_type = #{orderType}  </if>  order by o.create\_time desc </select> |

6，GROUP CONCAT和DISTINCT连用范例

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| **煤电项目**  <select id="analyzeTaskList" parameterType="LongMuckTask" resultType="LongMuckTask">  SELECT  a.\*,  GROUP\_CONCAT( DISTINCT b.driver\_name ) AS driverName,  c.taskFuel,  c.taskMileage,  d.dept\_name as deptName  FROM |

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| **回收项目去重大类**  SELECT  GROUP\_CONCAT( DISTINCT rot.type\_name ),  roc.order\_id  FROM  recycle\_order\_collection AS roc  LEFT JOIN recycle\_collection\_type AS rot ON roc.collection\_type = rot.id  GROUP BY  roc.order\_id |

7，MySQL创建只读账户

**MySQL 5.7：**

GRANT SELECT ON \*.\* TO 'read\_only\_user'@'ip' IDENTIFIED BY "password";

FLUSH PRIFILEGES;

select \* from mysql.user where user = "user\_read\_only"; 查询权限情况

“read\_only\_user”可以自定义名字， **ip**就是允许连接到这个数据库的ip，当然如果不限制ip，那就写成 **%**，最后的**password**就是连接密码了

**MySQL 8.0 :**

mysql8.0中必须分开，先创建用户、再给用户赋权;

创建用户设置只读权限:

CREATE USER 'read\_only\_user'@'ip' IDENTIFIED BY 'password';

GRANT SELECT ON \*.\* TO 'read\_only\_user'@'ip' WITH GRANT OPTION;

REVOKE all privileges ON \*.\* FROM 'read\_only\_user'@'ip';

flush privileges;

select \* from user where User='read\_only\_user' \G; 查看权限

8，MySQL获取本周第一天，最后一天 ，本月第一天，最后一天等

-- 今天 SELECT DATE\_FORMAT(NOW(),'%Y-%m-%d 00:00:00') AS '今天开始';

SELECT DATE\_FORMAT(NOW(),'%Y-%m-%d 23:59:59') AS '今天结束';

-- 昨天 SELECT DATE\_FORMAT( DATE\_SUB(CURDATE(), INTERVAL 1 DAY), '%Y-%m-%d 00:00:00') AS '昨天开始';

SELECT DATE\_FORMAT( DATE\_SUB(CURDATE(), INTERVAL 1 DAY), '%Y-%m-%d 23:59:59') AS '昨天结束';

-- 上周

SELECT DATE\_FORMAT( DATE\_SUB( DATE\_SUB(CURDATE(), INTERVAL WEEKDAY(CURDATE()) DAY), INTERVAL 1 WEEK), '%Y-%m-%d 00:00:00') AS '上周一';

SELECT DATE\_FORMAT( SUBDATE(CURDATE(), WEEKDAY(CURDATE()) + 1), '%Y-%m-%d 23:59:59') AS '上周末';

-- 本周 SELECT DATE\_FORMAT( SUBDATE(CURDATE(),DATE\_FORMAT(CURDATE(),'%w')-1), '%Y-%m-%d 00:00:00') AS '本周一';

SELECT DATE\_FORMAT( SUBDATE(CURDATE(),DATE\_FORMAT(CURDATE(),'%w')-7), '%Y-%m-%d 23:59:59') AS '本周末';

-- 上面的本周算法会有问题,因为mysql是按照周日为一周第一天,如果当前是周日的话,会把时间定为到下一周. SELECT DATE\_FORMAT( DATE\_SUB(CURDATE(), INTERVAL WEEKDAY(CURDATE()) DAY), '%Y-%m-%d 00:00:00') AS '本周一';

SELECT DATE\_FORMAT( DATE\_ADD(SUBDATE(CURDATE(), WEEKDAY(CURDATE())), INTERVAL 6 DAY), '%Y-%m-%d 23:59:59') AS '本周末';

-- 上月

SELECT DATE\_FORMAT( DATE\_SUB(CURDATE(), INTERVAL 1 MONTH), '%Y-%m-01 00:00:00') AS '上月初';

SELECT DATE\_FORMAT( LAST\_DAY(DATE\_SUB(CURDATE(), INTERVAL 1 MONTH)), '%Y-%m-%d 23:59:59') AS '上月末';

-- 本月

SELECT DATE\_FORMAT( CURDATE(), '%Y-%m-01 00:00:00') AS '本月初';

SELECT DATE\_FORMAT( LAST\_DAY(CURDATE()), '%Y-%m-%d 23:59:59') AS '本月末';

9，MySQL计算本周第几天，本月第几天，本年第几天

SELECT DAYOFWEEK(CURDATE()); --查询今天是本周第几天，按第一天是礼拜日

SELECT DAYOFWEEK(CURDATE()-1); --查询今天是本周第几天，按第一天是礼拜一

SELECT WEEKDAY(CURRENT\_DATE); -- 查询今天是本周第几天，起始下标0，起始天星期日

SELECT DAYOFMONTH(CURDATE()); -- 当月第几天

SELECT DAYOFYEAR(CURDATE()); --当年第几天

SELECT LAST\_DAY(CURRENT\_DATE); -- 当月最后一天

10，MySQL减去时间函数

SELECT SUBDATE("2020-11-25", INTERVAL 30 DAY) AS RESULTDATE;

11，MySQL自增1

update student set **score=score+1** where id = 1