MySQL生产数据库SQL规范

1. MySQL请勿使用字符集utf8mb4，因为在MySQL数据转置和同步过程中会导致数仓汉字乱码，建议在初始化参数中设置好默认字符集，在创建表和增加列的时候不用再次指定字符集.

2. 在MySQL里面对于空字符串""当做非空对待，即定义改列为not null，依旧可以插进去空字符串""，也可以通过where col_name="" 匹配查询到该列数据。但是Oracle把空字符串""当做空值去对待，所以在MySQL中定义的not null列插入空字符串不报错，同步在Oracle里面就会报错，且在Oracle里面仅可通过where col_name is null匹配查询到该列数据。

3. 在MySQL里面可以插入年月日时分秒为"0000-00-00 00:00:00"的值，但是同步在Oracle里面就会报错，所以这种日期格式的值应该严格禁止的。

4. 对于需要重建的表，最好先进行truncate操作，然后等数据仓库这边人员回复后再执行

5. 增加字段例：
```
alter table t_customer_address
add column mobile varchar(20) charset utf8 collate utf8_general_ci null comment '移动电话' after update_by,
add column office_tel varchar(40) charset utf8 collate utf8_general_ci null comment '办公电话' after mobile,
add column home_tel varchar(40) charset utf8 collate utf8_general_ci null comment '住宅电话' after office_tel,
add column fax varchar(40) charset utf8 collate utf8_general_ci null comment '传真电话' after home_tel,
change update_by update_by bigint(20) null comment '修改人员';
```
说明：
1）这种可以去掉对列值字符集定义：charset utf8 collate utf8_general_ci，一般默认值会指定utf8，所以列可以去掉该值的定义
2）定义null，默认为null,所以null不用定义
3）走"等回复后再执行" 流程

1. 增加字段
```
alter table tablename
add column column1 type1 comment 'comment1' after columnafter1,
add column column2 type2 comment 'comment2' after columnafter2,

=CONCATENATE("alter TABLE ",B2)
=CONCATENATE("add column ",D3," ",G3," comment '",F3,"'")
```

2. 删除字段
```
alter table tablename
drop column1,
drop column2,
drop column3;

=CONCATENATE("alter TABLE ",B2)
=CONCATENATE("drop column ",E3,",")
```

3. 修改字段类型
```
alter table tablename
change column1 column11 type1,
change column2 column22 type2;

=CONCATENATE("alter TABLE ",B2)
```

4. 重命名字段

5. 增加主键

```
alter table tablename add primary key (pk_column);
```

=CONCATENATE("alter TABLE ",B2)

6. 删除主键
```
alter table tablename drop primary key;
```

7. 创建表

8. 删除表

```
DROP TABLE T_CHANNEL_ORGAN;
```

9. 添加非空约束
```
alter table tablename modify column1 varchar(256) not null;
```

=CONCATENATE("alter TABLE ",B2," modify ",E2," ",F2," not null;")

10. 添加列默认值
```
alter table tb1 modify val varchar(256) default 1;
```

=CONCATENATE("alter TABLE ",B2," modify ",E2," ",F2," default ",G2,";")
11. 添加列备注
```
alter table tb1 modify val varchar(256) comment '移动电话';
```
=CONCATENATE("alter TABLE ",B2," modify ",E2," ",G2," comment '",F2,"';")

12. 添加索引
```
create index ix_tb1_id on tb1(name);
```
=CONCATENATE("create index ",F2," on ",B2,"(",F2,");")
13. 删除索引
```
alter table tb1 drop index ix_tb1_id;
```
=CONCATENATE("alter table ",B2," drop index ",F2,";")

14. 添加外键约束
```
alter table tb1 add constraint fk_reference_6 foreign key tb1(col1) references tb2(id);
```
=CONCATENATE("alter table ",B2," add constraint ",F2," foreign key ",B2,"(",E2,")"," references ",G2,"(",H2,");")

15. 删除外键约束
```
alter table tb1 drop foreign key fk_reference_6;
```

16.