2018年4月10日，11点：

在对一个有3625080条记录的表进行group的时候，由于数据量太大，导致该db上其他几个表的索引文件出错，数据库停止服务。

第一阶段尝试：
systemctl restart mysqld ： 重启数据库无效
reboot：重启服务器，无效

第二阶段：
根据mysq配置文件：vi /etc/my.cnf
查找到mysql的log：log-error=/var/log/mysqld.log
查看log记录：vi /var/log/mysqld.log

发现如下报错记录，导致db无法启动：

```
2018-04-10 11:34:12 10506 [Note] InnoDB: from the doublewrite buffer...
2018-04-10 11:34:12 10506 [Note] InnoDB: 128 rollback segment(s) are active.
2018-04-10 11:34:12 10506 [Note] InnoDB: Waiting for purge to start
2018-04-10 11:34:12 10506 [Note] InnoDB: 5.6.39 started; log sequence number 11587937202
2018-04-10 11:34:12 10506 [Note] Server hostname (bind-address): '*'; port: 3308
2018-04-10 11:34:12 10506 [Note] IPv6 is available.
2018-04-10 11:34:12 10506 [Note]   - '::' resolves to '::';
2018-04-10 11:34:12 10506 [Note] Server socket created on IP: '::'.
2018-04-10 11:34:12 10506 [ERROR] /usr/sbin/mysqld: Table './mysql/db' is marked as crashed and should be repaired
2018-04-10 11:34:12 10506 [ERROR] Fatal error: Can't open and lock privilege tables: Table './mysql/db' is marked as crashed and should be repaired
180410 11:34:12 mysqld_safe mysqld from pid file /var/run/mysqld/mysqld.pid ended
```

于是cd到mysql文件目录：cd /var/lib/mysql
根据报错信息进入mysql目录：cd mysql，开始检查db文件的错误：myisamchk -a db

```
[root@k8s-master-www mysql]# myisamchk -a db
Checking MyISAM file: db
Data records:        4    Deleted blocks:        0
myisamchk: warning: Table is marked as crashed
myisamchk: warning: 1 client is using or hasn't closed the table properly
- check file-size
- check record delete-chain
- check key delete-chain
- check index reference
- check data record references index: 1
myisamchk: error: Found key at page 2048 that points to record outside datafile
MyISAM-table 'db' is corrupted
Fix it using switch "-r" or "-o"
```

根据提示，开始修复：myisamchk -r db

```
[root@k8s-master-www mysql]# myisamchk -r db
- recovering (with sort) MyISAM-table 'db'
Data records: 4
- Fixing index 1
- Fixing index 2
```

完成修复后，发现log还有其他表也有同样的错误：

```
2018-04-10 11:44:02 19366 [Warning] IP address '180.154.152.44' could not be resolved: Name or service not known
2018-04-10 11:44:37 19366 [ERROR] /usr/sbin/mysqld: Table './yy_sys/tmp_pingan' is marked as crashed and should be repaired
2018-04-10 11:44:38 19366 [ERROR] /usr/sbin/mysqld: Table './yy_sys/tmp_pingan' is marked as crashed and should be repaired
2018-04-10 11:44:38 19366 [ERROR] /usr/sbin/mysqld: Table './yy_sys/tmp_pingan' is marked as crashed and should be repaired
2018-04-10 11:44:38 19366 [ERROR] /usr/sbin/mysqld: Table './yy_sys/tmp_pingan' is marked as crashed and should be repaired

2018-04-10 11:46:19 19366 [ERROR] /usr/sbin/mysqld: Table './statistic/phonedat' is marked as crashed and should be repaired
```

用上述同样的方式，逐一完成修复即可。