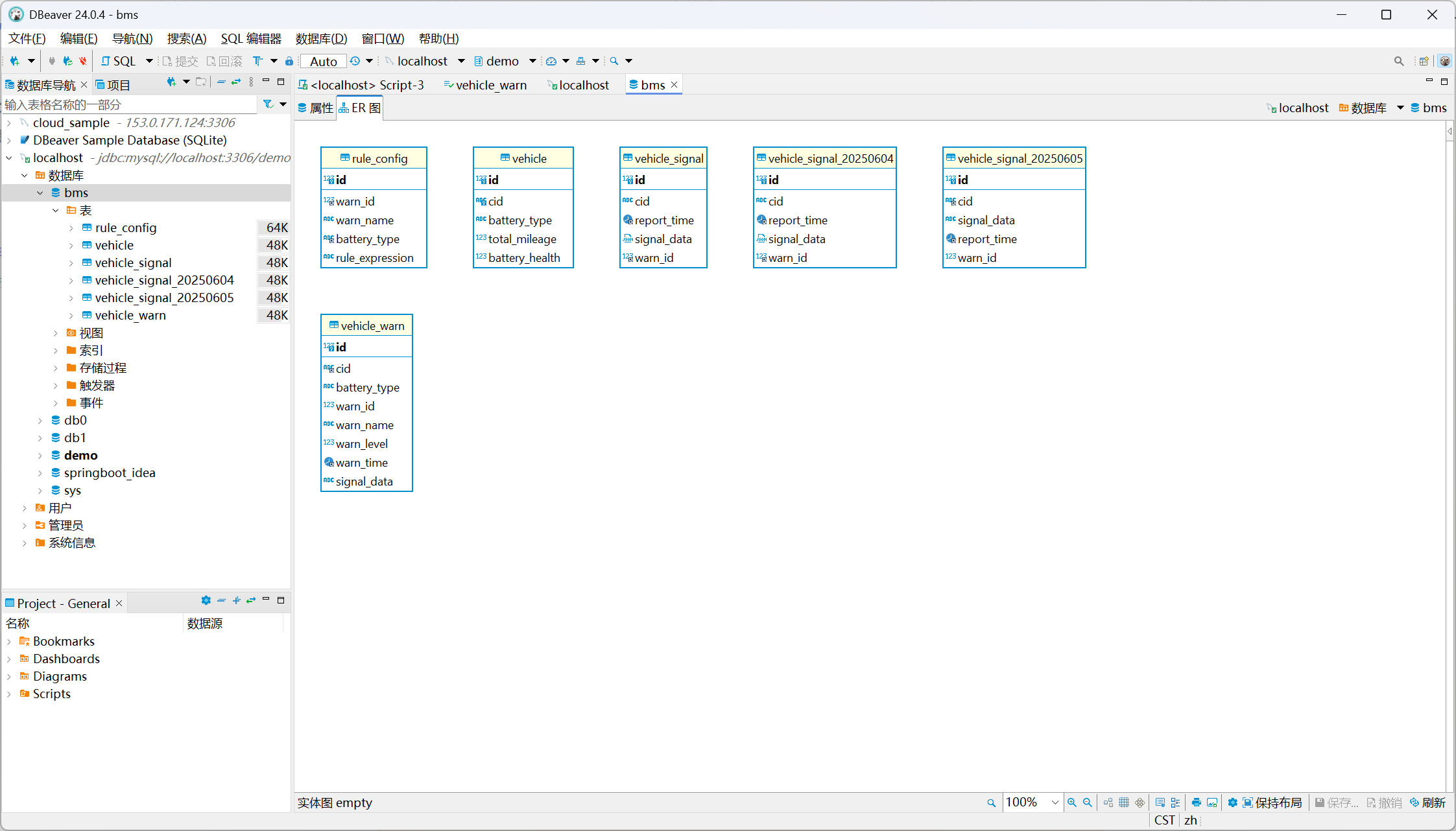
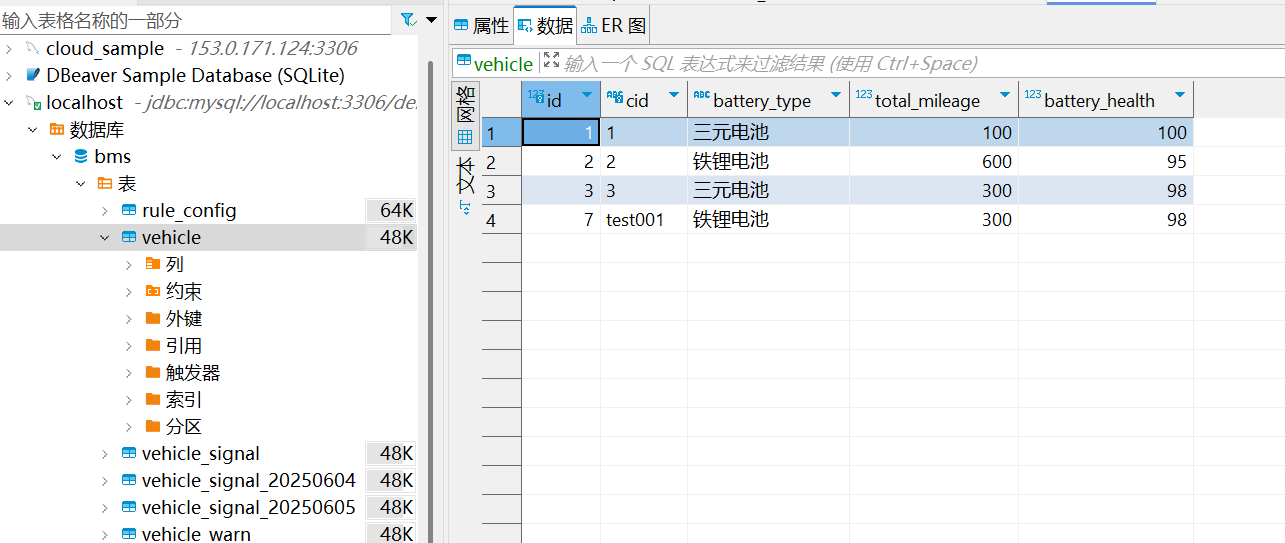
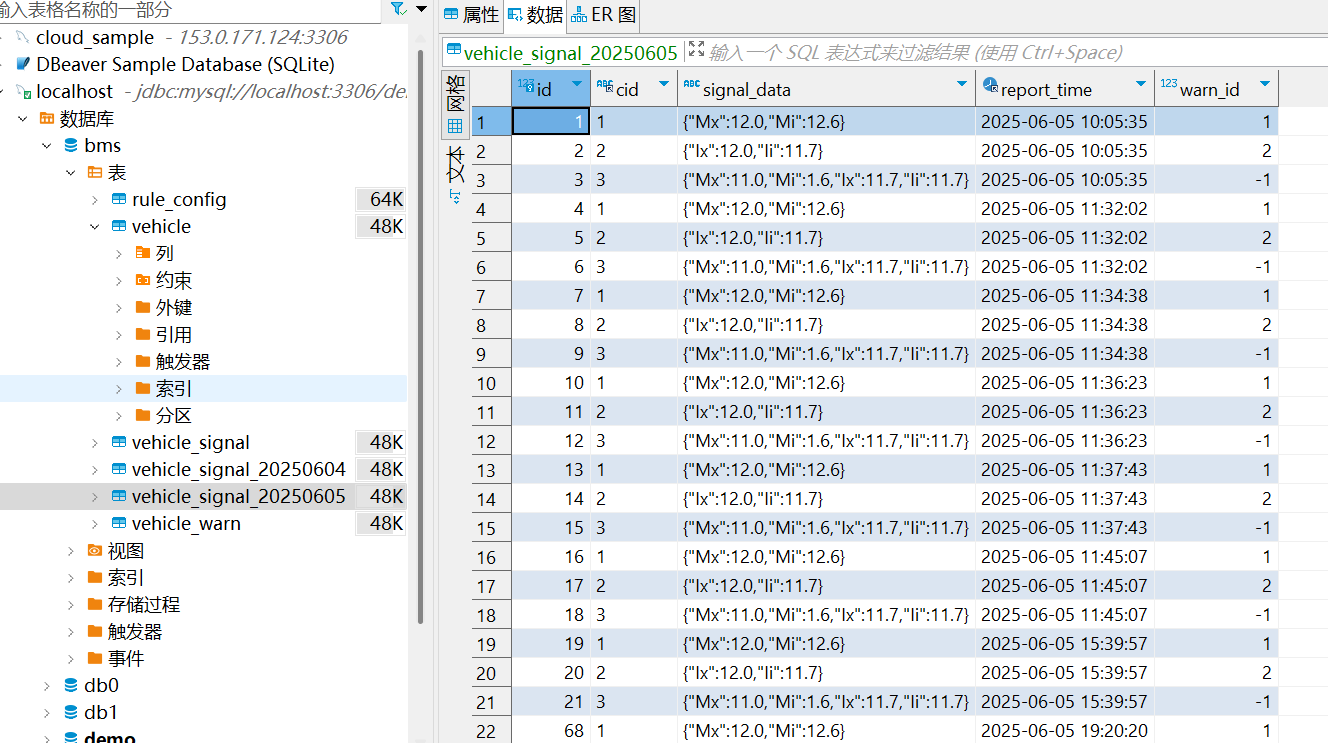
**数据库ER图**

****

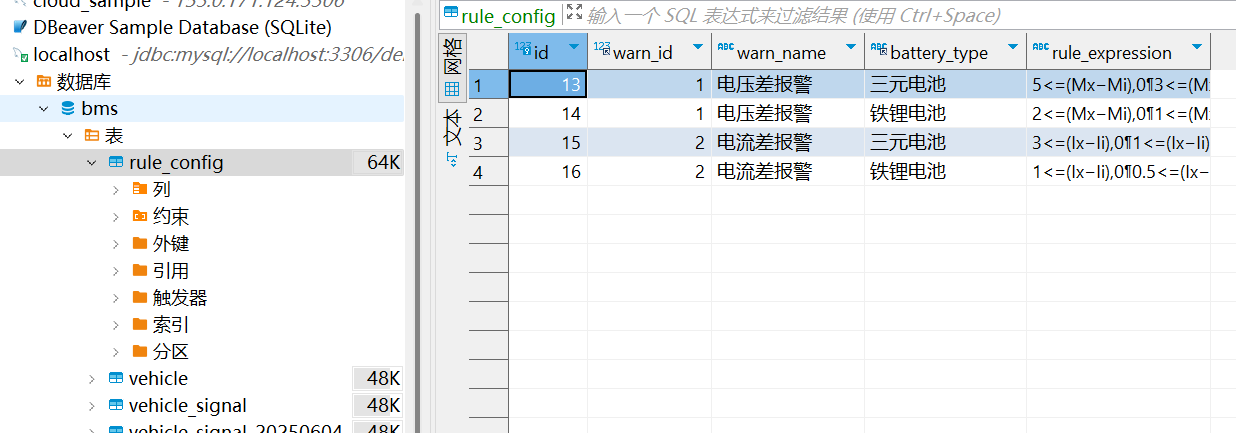
**汽车信息表数据**

****

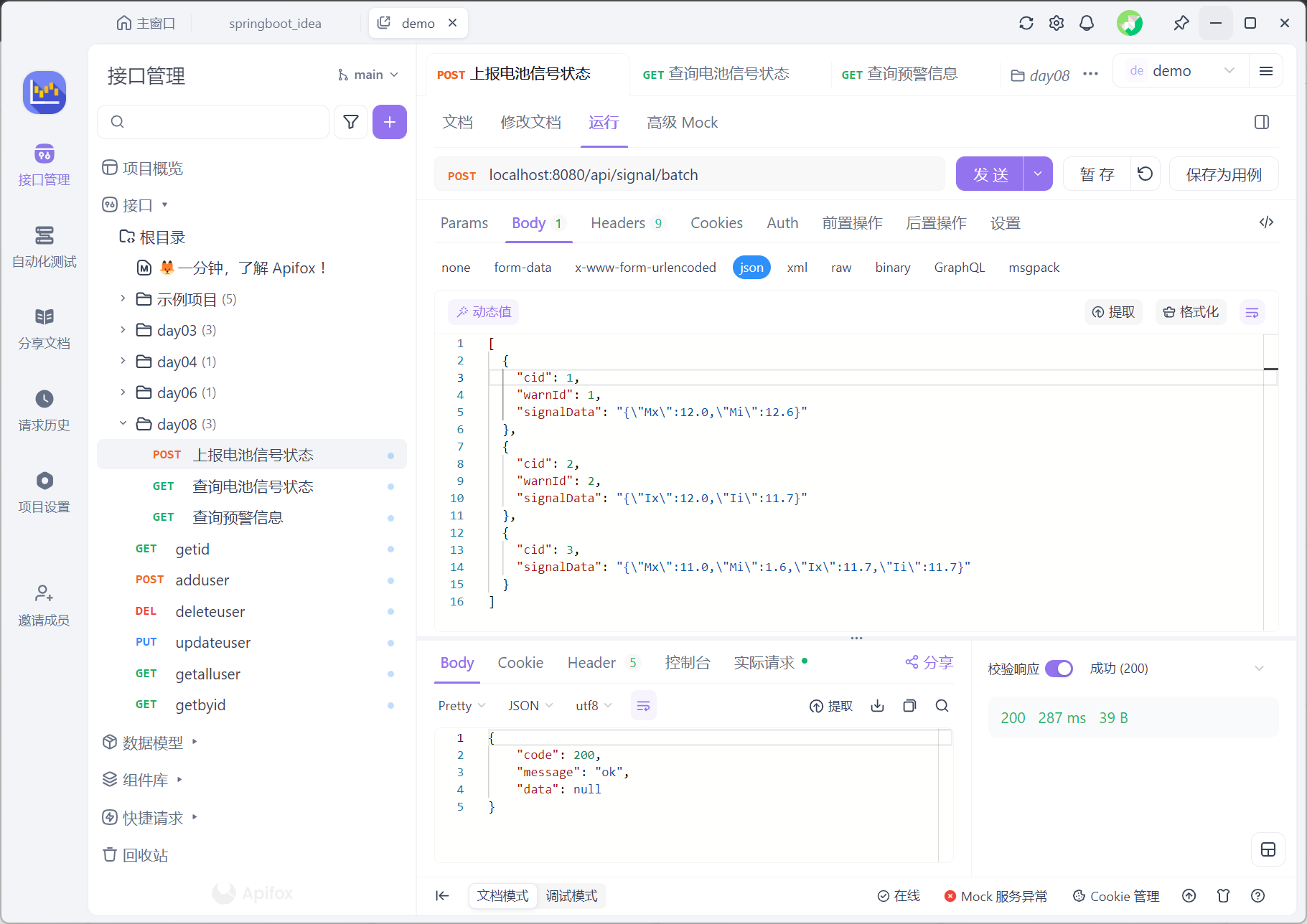
**车辆上报信号数据**

****

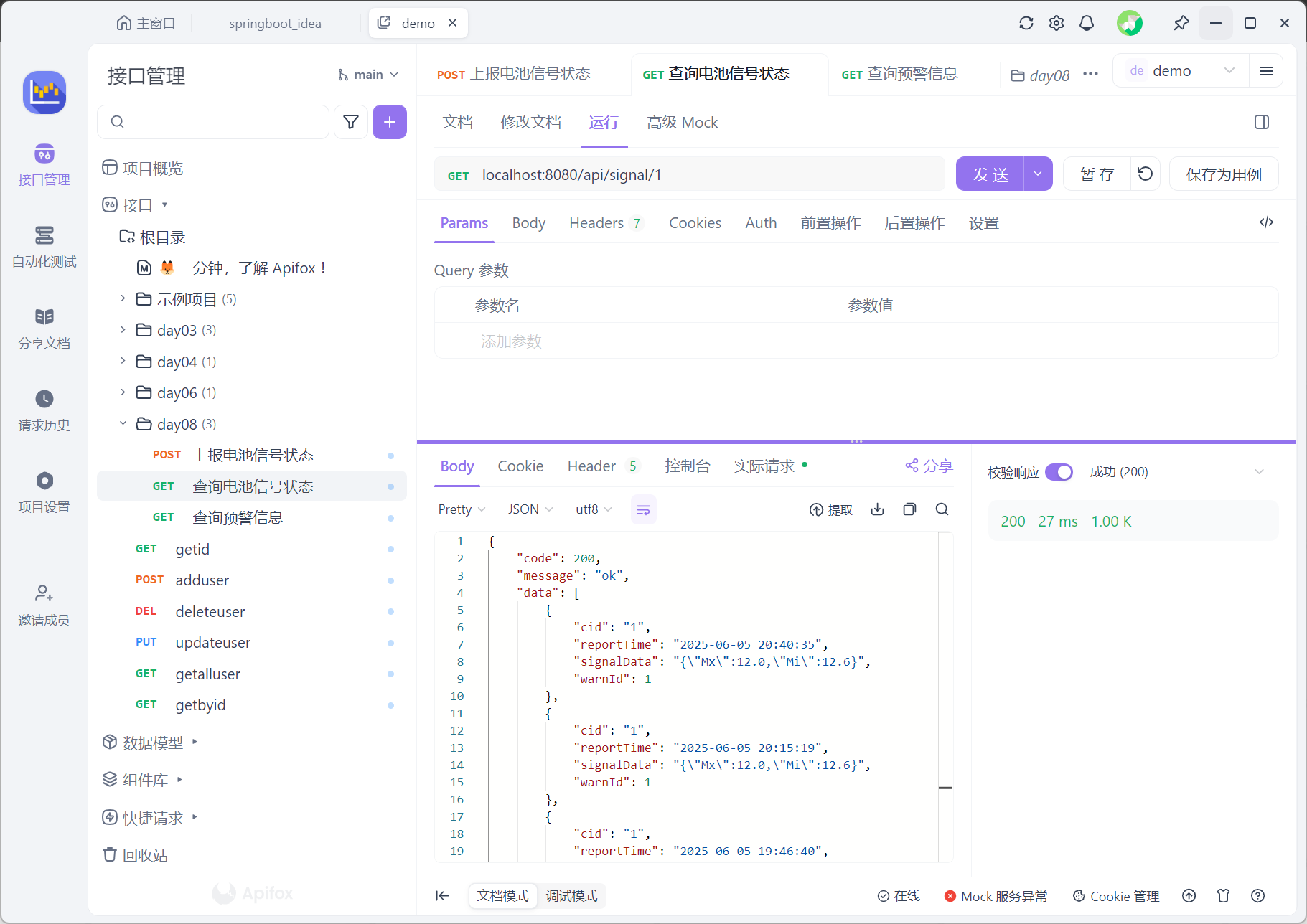
**规则表数据**

****

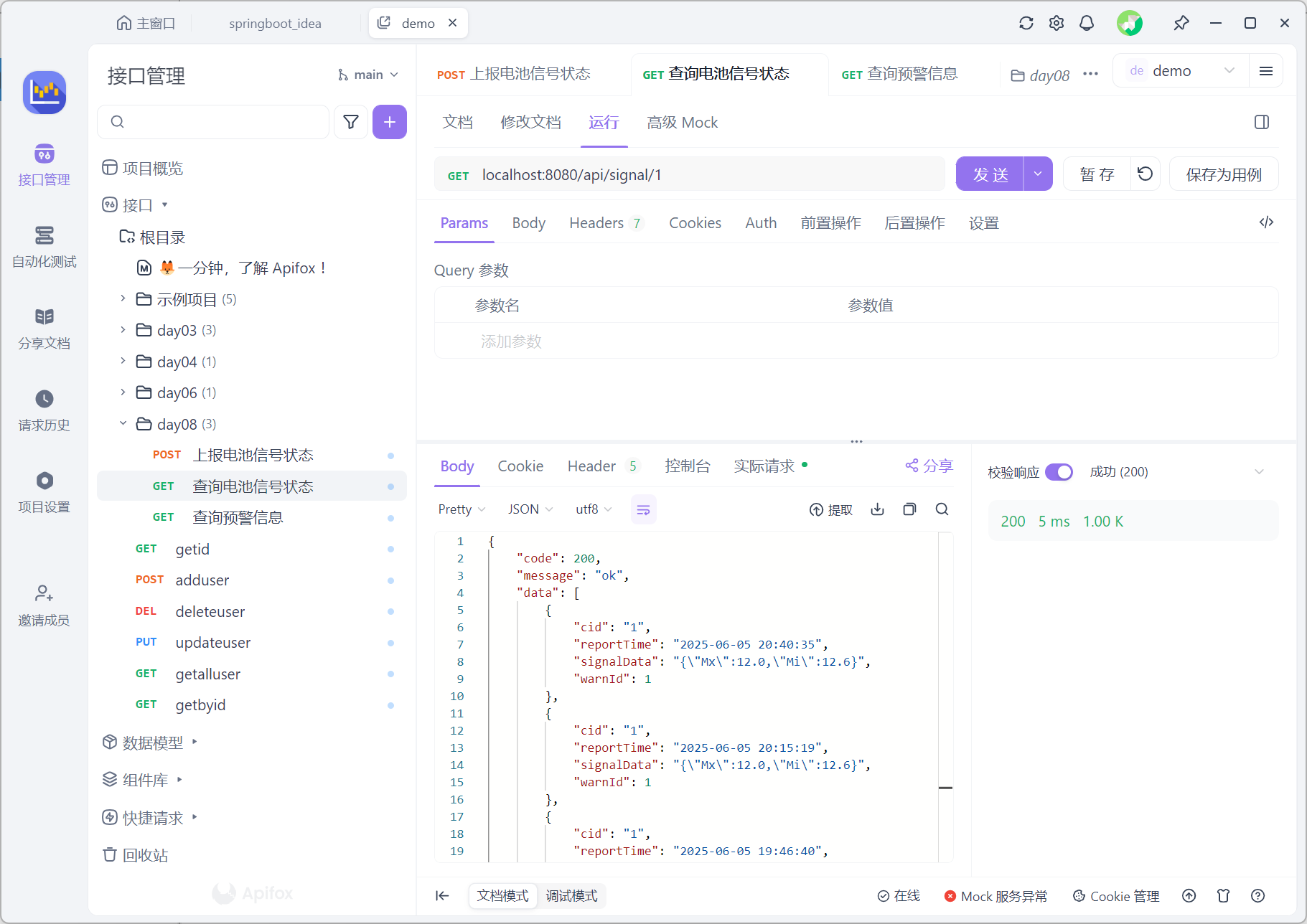
**通过接口上报信号**

****

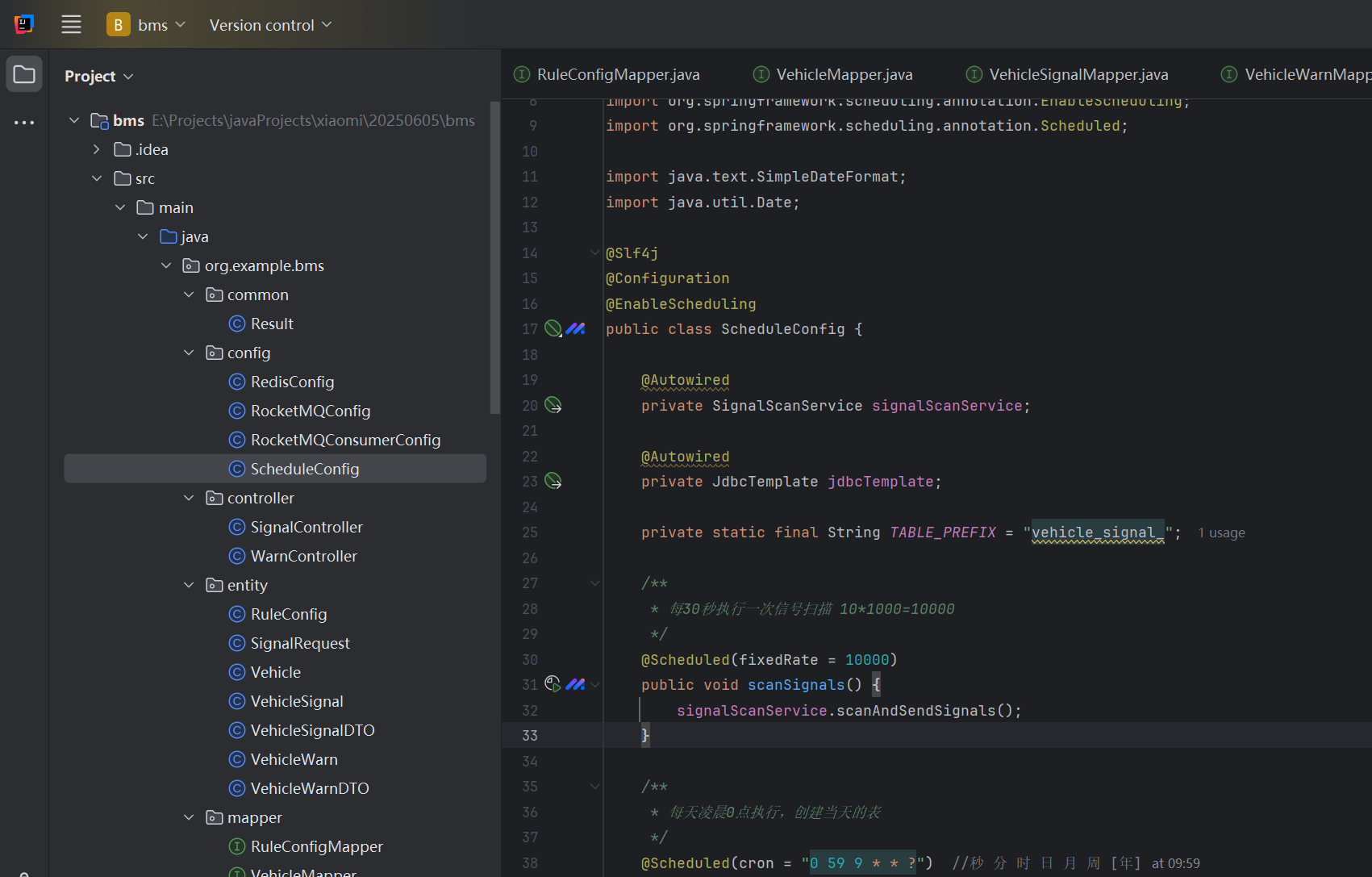
**查询上报的信号数据（第一次查询）**

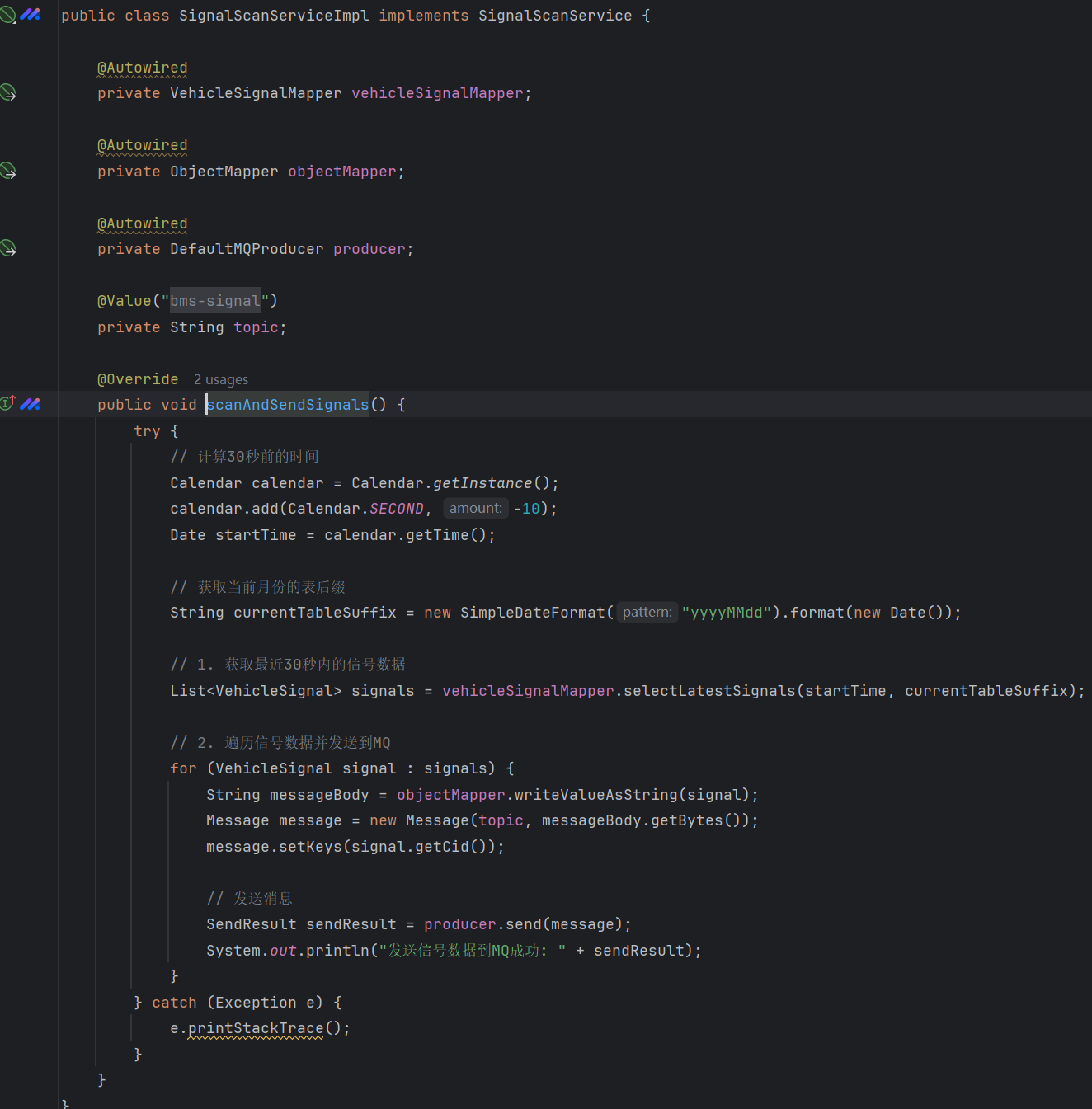
****

**（缓存查询）**

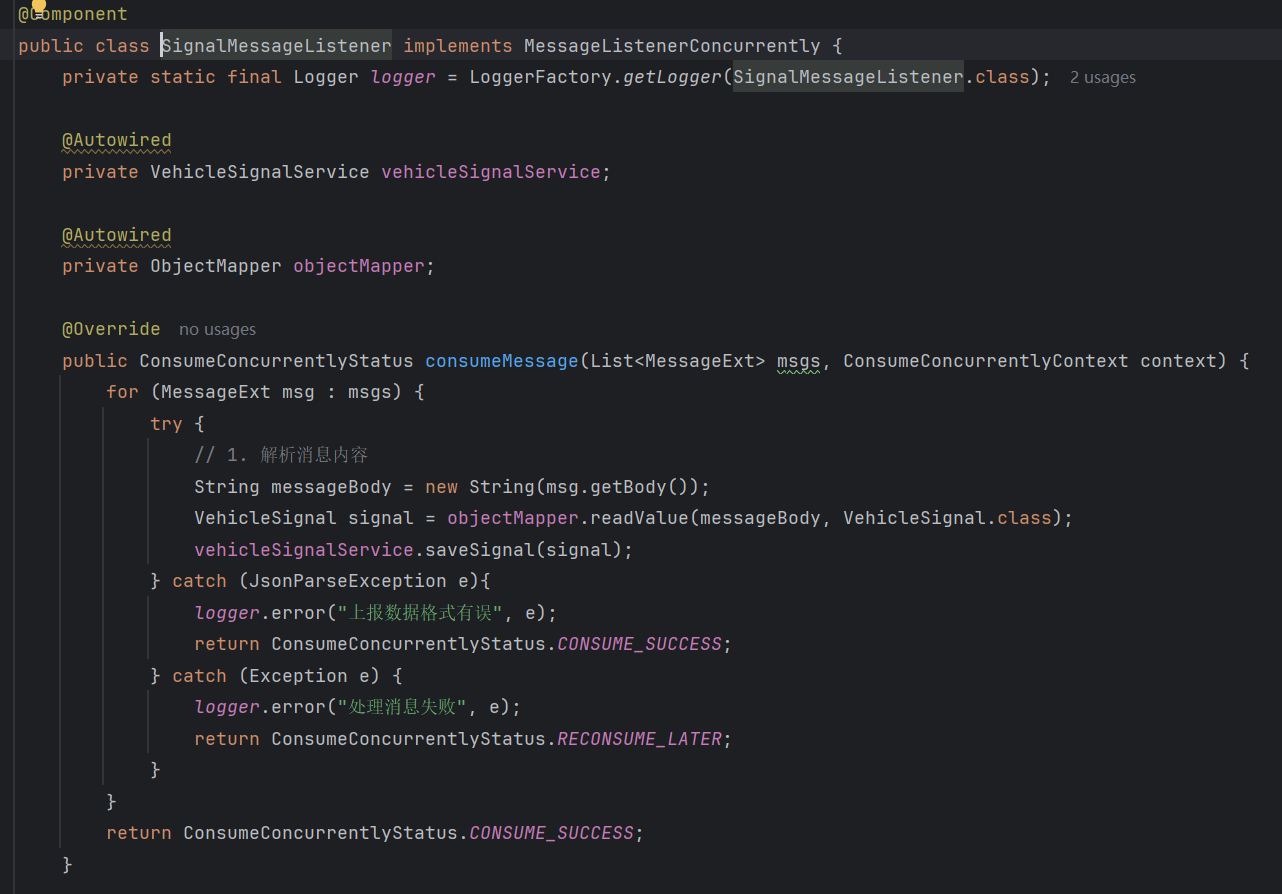
****

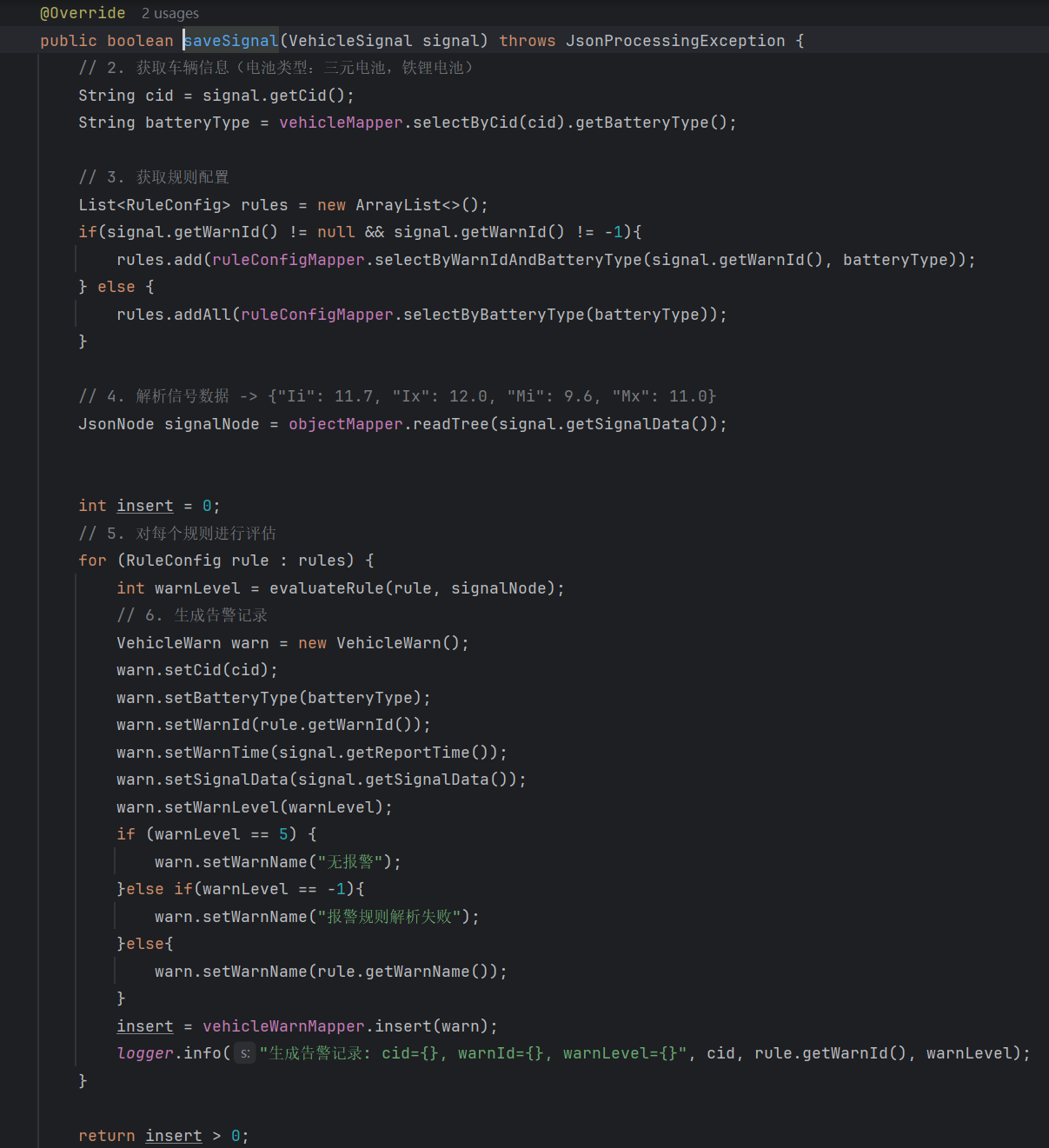
**定时扫描信号发送到mq中**

****

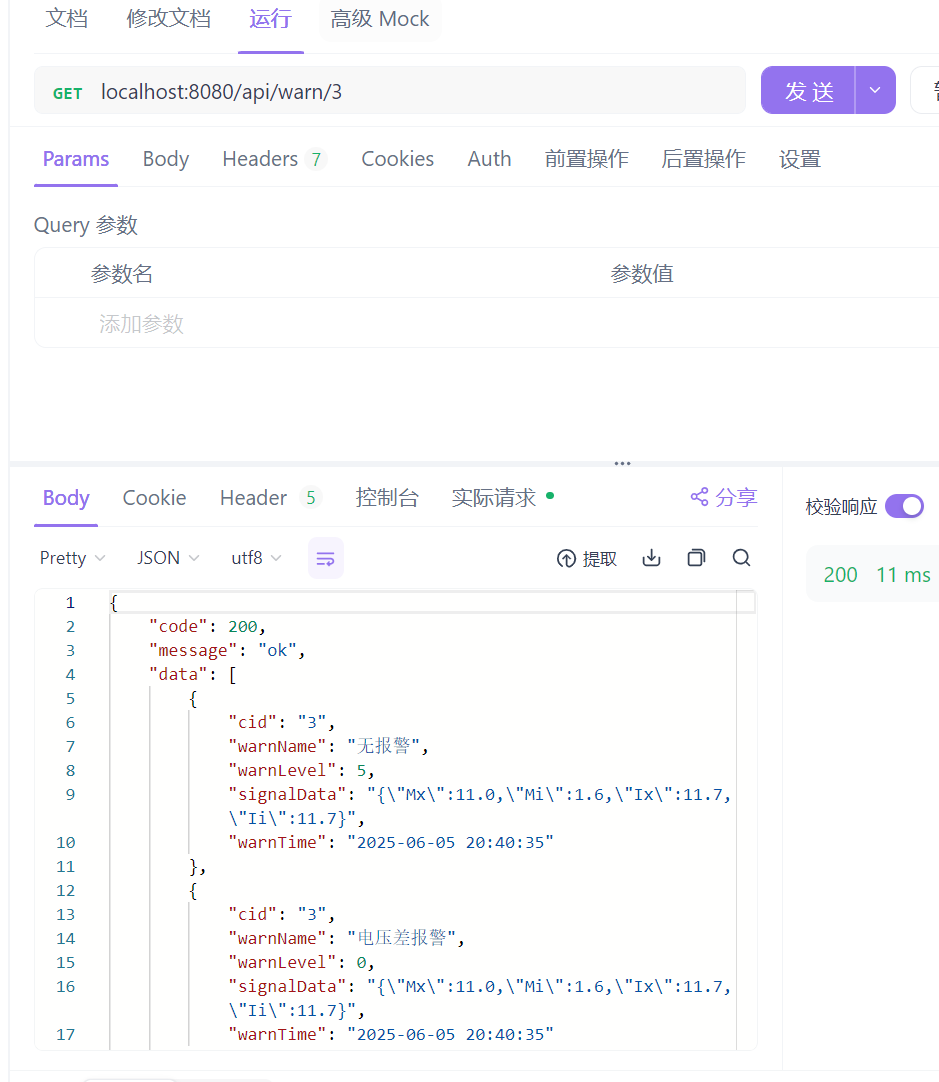
****

**消费mq中的信号，异步生成预警信息**

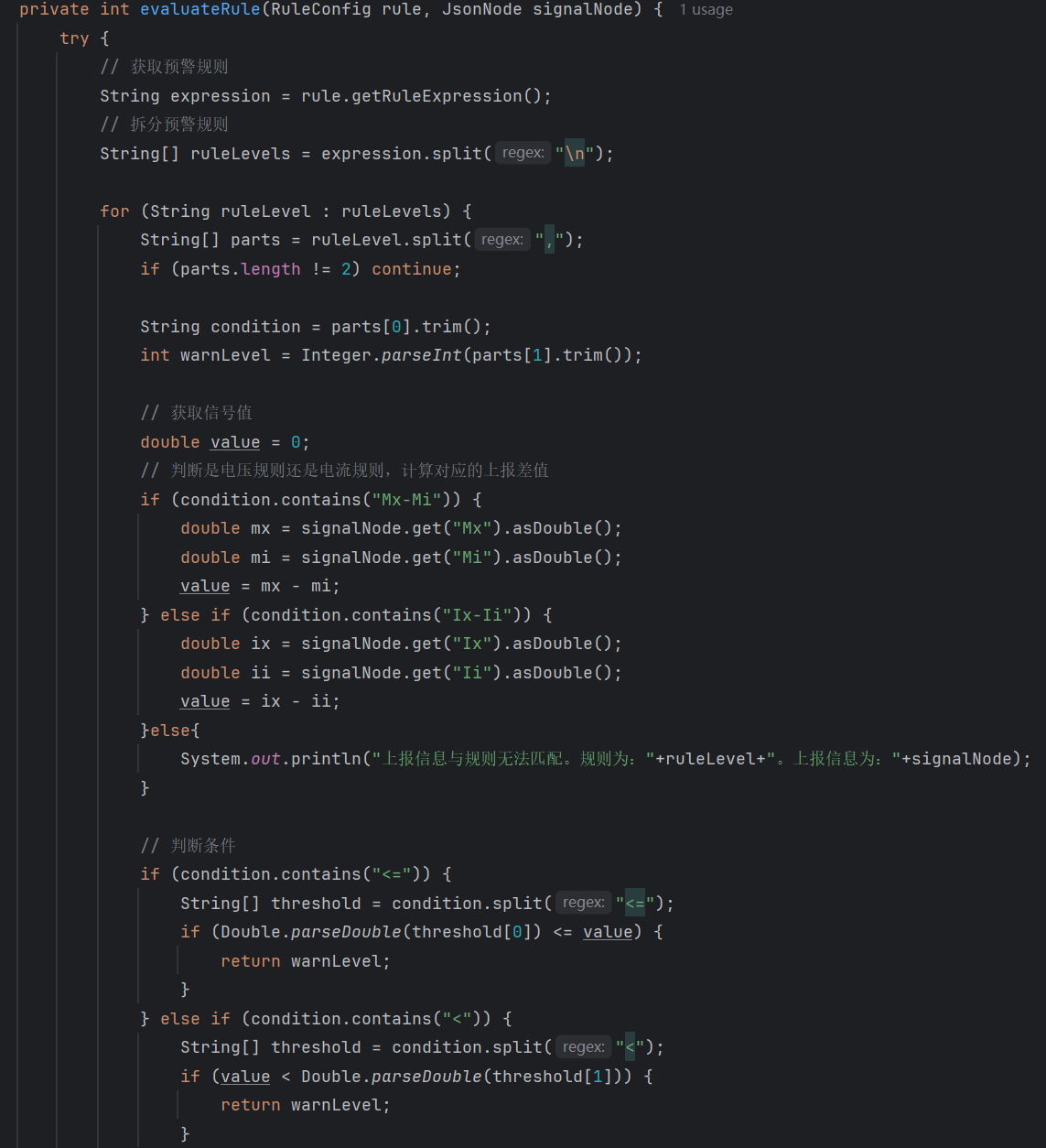
****

****

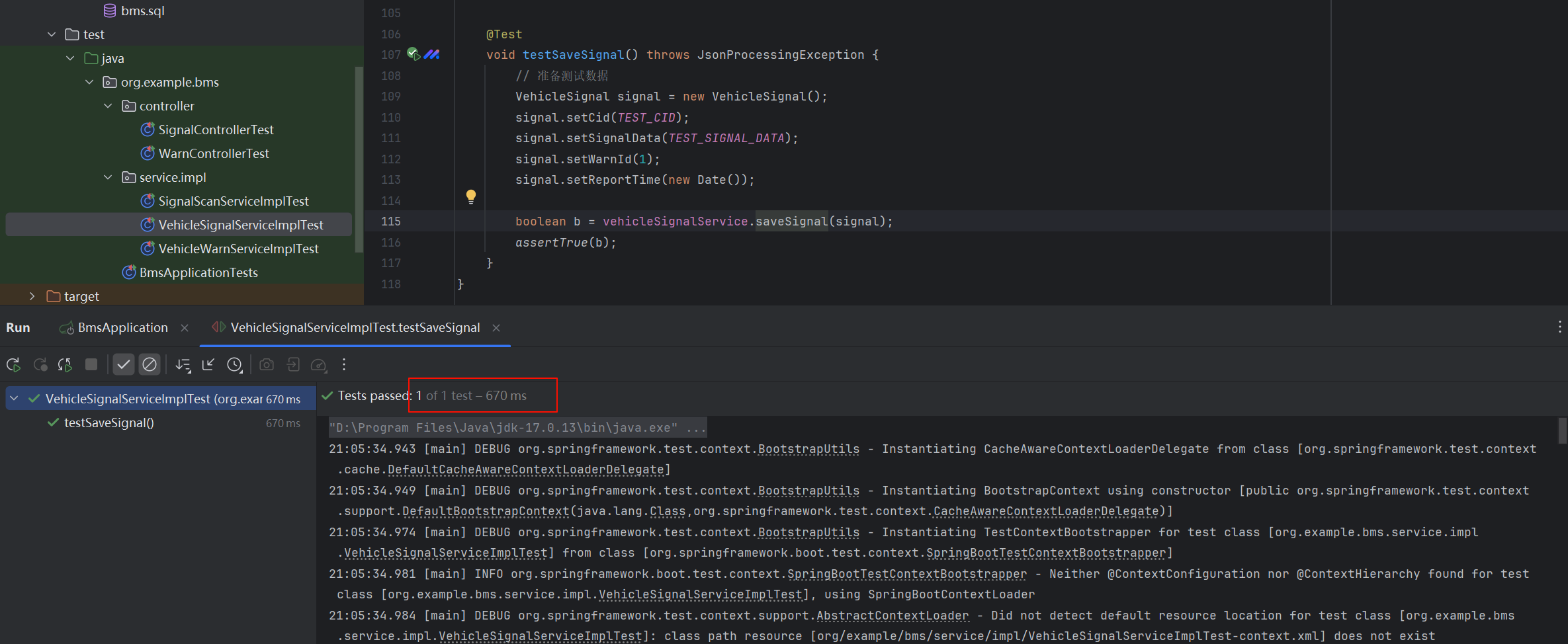
**通过预警接口查询指定车辆的预警信息**

****

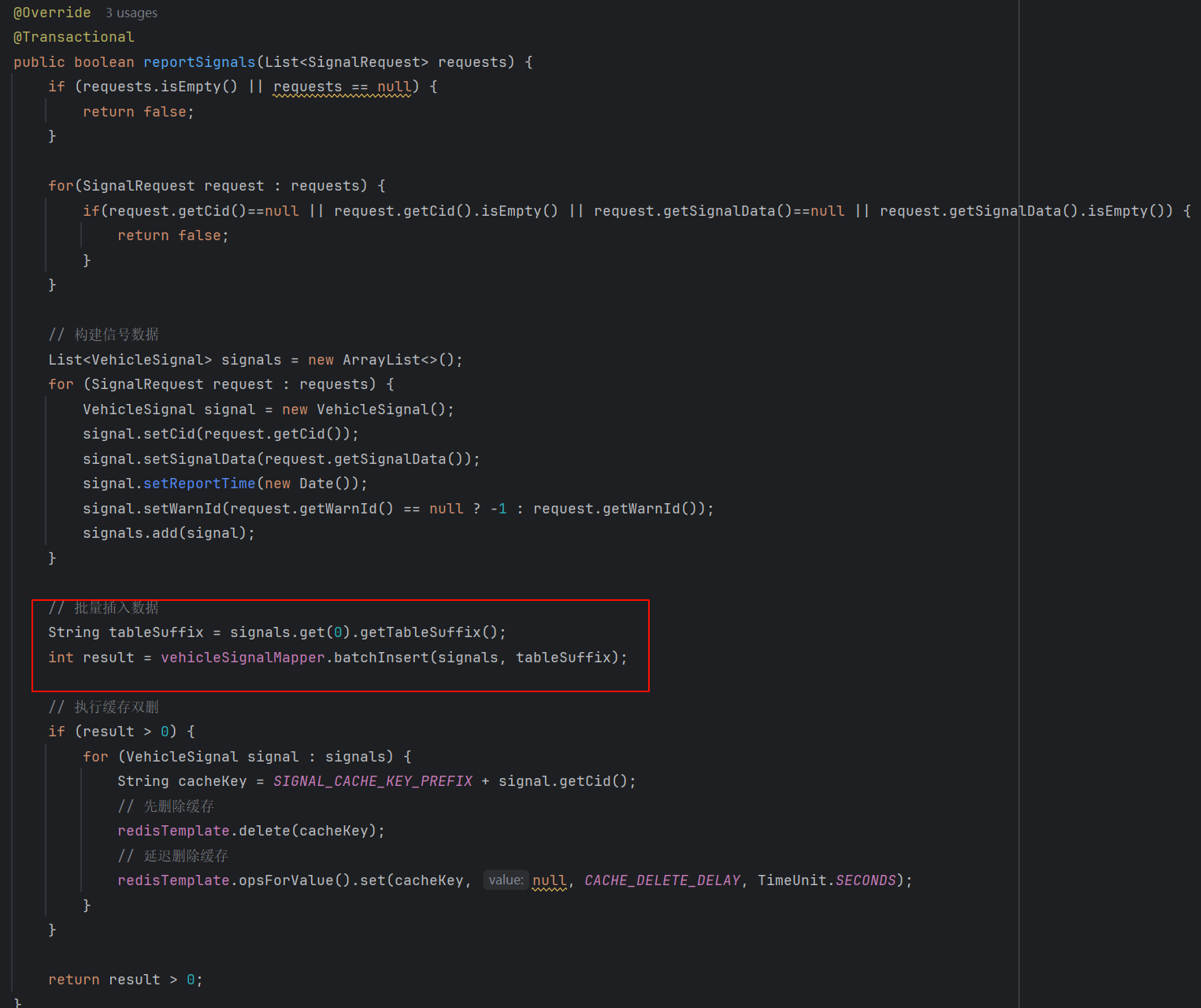
**从数据库中获取预警规则并解析得到预警等级**

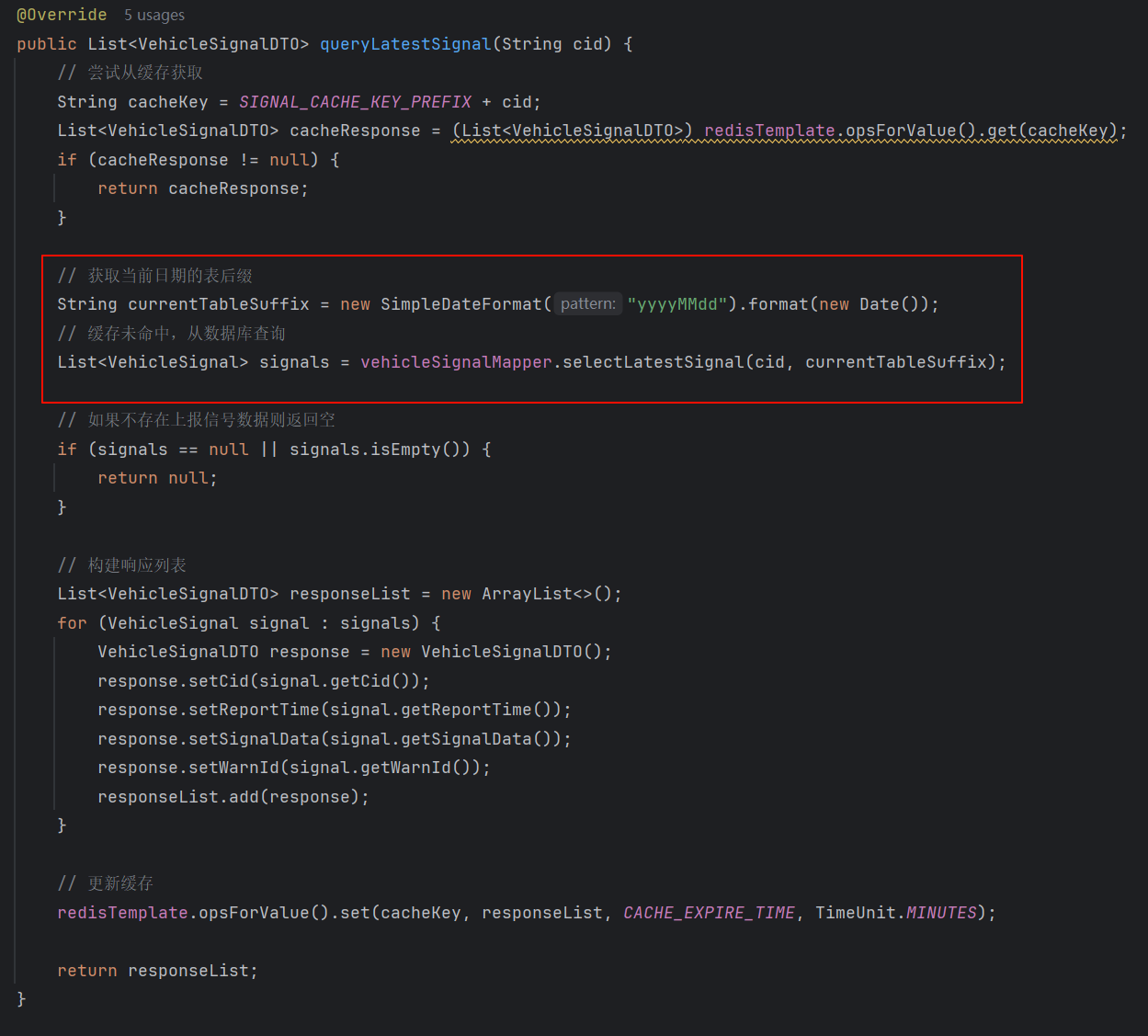
****

**实时规则的接口性能测试和优化，响应时间670ms**

****

**数据库存储和查询方案采用分表存储和查询，并进行批量插入而不是循环单条插入**

****

****

**单元测试**

