The background is a dark blue gradient with a subtle pattern of white dots. Overlaid on this are several concentric circles and arcs in a lighter blue color. Some of these arcs have degree markings, such as 40, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, and 260. There are also small arrows pointing in various directions, suggesting a sense of rotation or movement.

DATABASE SYSTEM LABS - ADVANCED SQL: TRIGGER

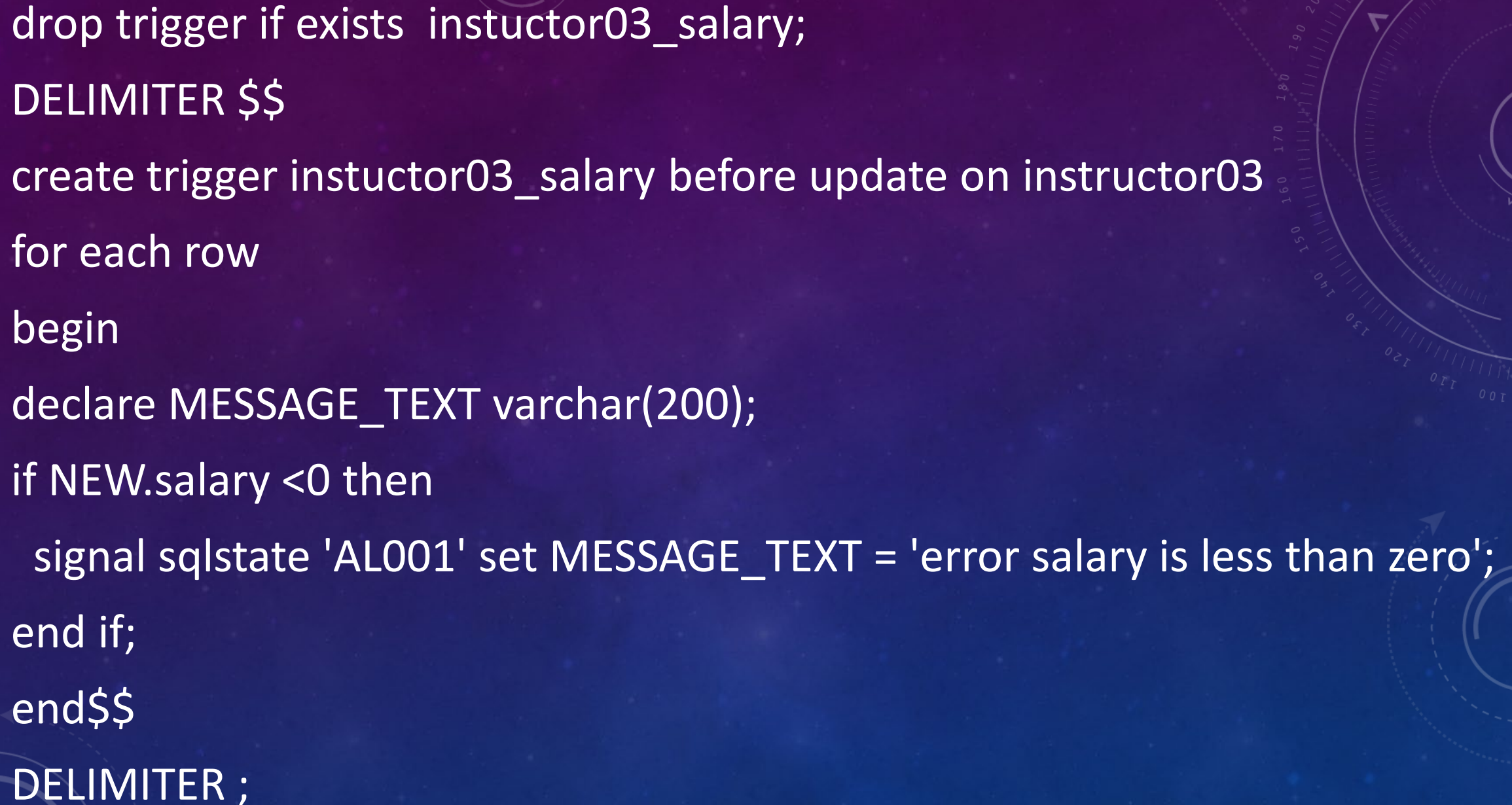
李旭东

LEEXUDONG@NANKAI.EDU.CN

NANKAI UNIVERSITY

OBJECTIVES

- Trigger
 - A trigger is a statement that the system executes automatically as a side effect of a modification to the database
 - insert, update, delete
 - before, after



```
drop trigger if exists instuctor03_salary;  
DELIMITER $$  
create trigger instuctor03_salary before update on instructor03  
for each row  
begin  
declare MESSAGE_TEXT varchar(200);  
if NEW.salary <0 then  
    signal sqlstate 'AL001' set MESSAGE_TEXT = 'error salary is less than zero';  
end if;  
end$$  
DELIMITER ;
```


LAB(1)

- 1.创建一个新教师表instructor3，该教师表的元祖集合为空值；
- 2.创建日志表mylog3，属性包括id, tbname, colname, event, oldvalue,newvalue, date等字段，其中id为自增长字段auto_increment；
- 3.针对新教师表instructor3，增加插入、修改两个触发器，记录对该表操作的事件类型和相关值到日志表mylog3
- 4.从原教师表instructor中导入ID大于等于30000的5个记录信息到新教师表instructor3，显示导入前后新教师表的记录信息和日志表mylog3；
- 5. 在新教师表instructor3对所有教师的工资在原来基础上增加一倍，显示修改前后新教师表的记录信息和日志表mylog3 ；
- 6. 删除新教师表instructor3中的所有教师，显示删除前后新教师表的记录信息和日志表mylog3 ；
- 7. 查看日志表mylog3中的记录情况