1. **定义视图v\_customeInfo，要求可以替换同名视图，列出所有客户相关信息，输出属性包括客户编号（CUST\_ID）、完整联系地址（PROVICIAL\_REGION、CITY与ADDRESS三个字段拼接）、邮政编码（POSTAL\_CODE）、客户名称（类型为I的客户输出在Individual表中对应的姓名，使用LAST\_NA ME与FIRST\_NAME拼接；类型为B的客户输出在business表中对应的NAME）**

DROP VIEW IF EXISTS v\_customeInfo;

CREATE VIEW v\_customeInfo AS

SELECT c1.CUST\_ID , CONCAT(c1.PROVICIAL\_REGION,c1.CITY,c1.ADDRESS) AS accommadation,c1.POSTAL\_CODE,NAME AS whole\_name

FROM customer AS c1,business AS b

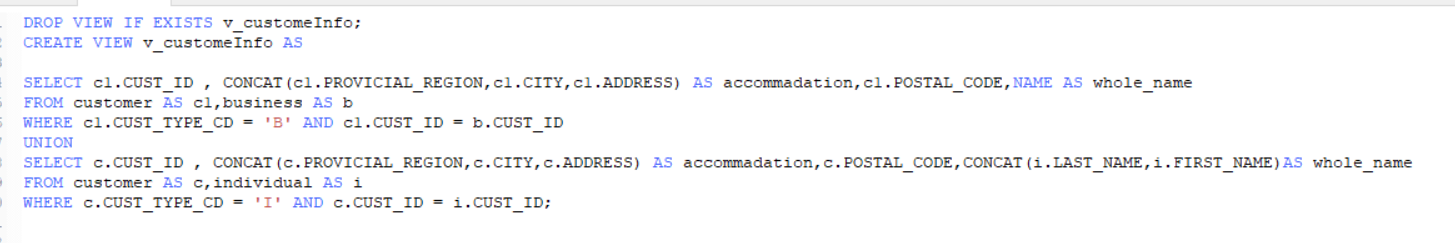
WHERE c1.CUST\_TYPE\_CD = 'B' AND c1.CUST\_ID = b.CUST\_ID

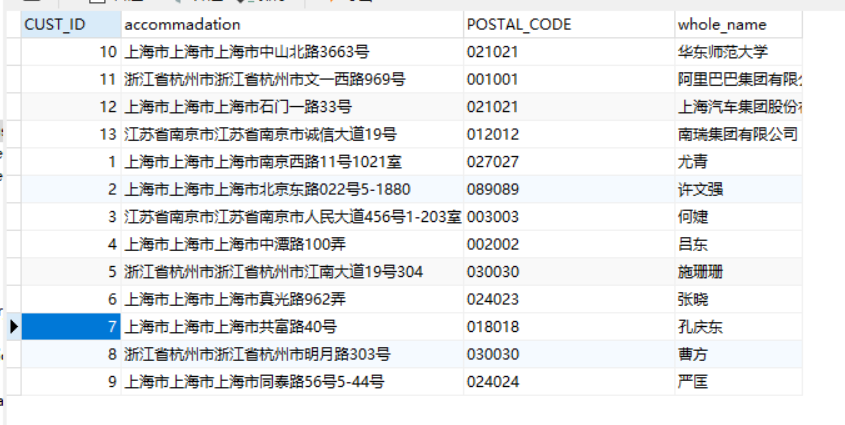
UNION

SELECT c.CUST\_ID , CONCAT(c.PROVICIAL\_REGION,c.CITY,c.ADDRESS) AS accommadation,c.POSTAL\_CODE,CONCAT(i.LAST\_NAME,i.FIRST\_NAME)AS whole\_name

FROM customer AS c,individual AS i

WHERE c.CUST\_TYPE\_CD = 'I' AND c.CUST\_ID = i.CUST\_ID;





**（2）定义视图v\_transInfo，从acc\_transaction中查出不在其开户行进行的交易记录信息（即EXECUTION\_BRANCH\_ID不为该账户对应的OPEN\_BRANCH\_ID），输出属性包括交易金额（AMOUNT）、交易时间（TXN\_DATE）、交易类型（CD显示为现金存入，CW显示为现金取出，TF显示为汇款转出，TT显示为汇款转入，IC显示为利息计入，LI显示为贷款拨入）、执行交易的分支机构名称（EXECUTION\_BRANCH\_NAME）、开户分支银行名称（OPEN\_BRANCH\_NAME）**

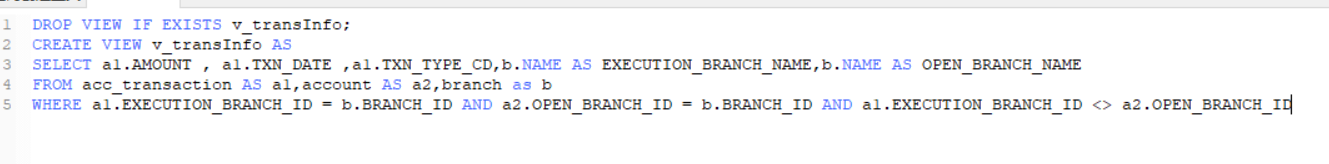
DROP VIEW IF EXISTS v\_transInfo;

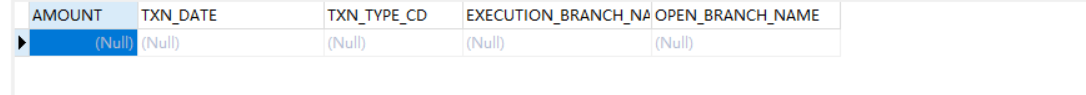
CREATE VIEW v\_transInfo AS

SELECT a1.AMOUNT , a1.TXN\_DATE ,a1.TXN\_TYPE\_CD,b.NAME AS EXECUTION\_BRANCH\_NAME,b.NAME AS OPEN\_BRANCH\_NAME

FROM acc\_transaction AS a1,account AS a2,branch as b

WHERE a1.EXECUTION\_BRANCH\_ID = b.BRANCH\_ID AND a2.OPEN\_BRANCH\_ID =b.BRANCH\_ID AND a1.EXECUTION\_BRANCH\_ID <> a2.OPEN\_BRANCH\_ID





**（3）为了备份数据或复制生产数据进行测试，经常会需要把数据从现有的表复制到新的（临时）表中，可以用CREATE TABLE ... AS ...子句进行表的复制。创建存储过程（copyTransactionFrom），该存储过程接收一个参数：起始日期（fDATE），功能是将acc\_transaction表中交易日期（TXN\_DATE）晚于等于起始日期的记录全部信息复制到新表（acc\_transactionNew）中（该表如存在应先删除）。提示：在存储过程中执行DDL语句需要特殊处理。**

DROP PROCEDURE IF EXISTS copyTransactionFrom;

CREATE PROCEDURE copyTransactionFrom(in fDATE datetime)

BEGIN

DROP TABLE IF EXISTS acc\_transactionNew;

CREATE TABLE acc\_transactionNew AS

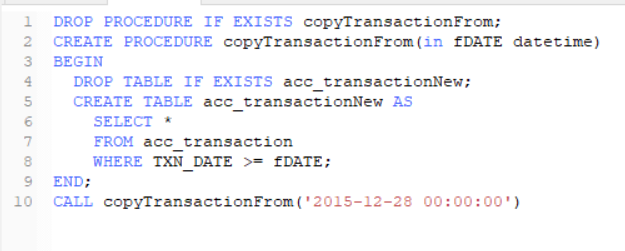
SELECT \*

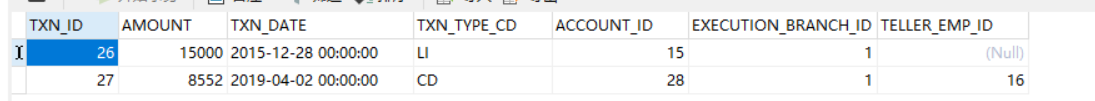
FROM acc\_transaction

WHERE TXN\_DATE >= fDATE;

END;

CALL copyTransactionFrom('2015-12-28 00:00:00')





**（4）编写函数func\_vipid，接收输入参数after\_date，返回开户日期（OPEN\_DATE）晚于after\_date的、且可用余额最多的账户对应的客户编号（CUST\_ID）。**

**（5）编写函数func\_rand\_email，随机生成合法的邮箱地址，@之前为长度不超过50的字符串，字符串中符号可包括a-z、A-Z、0-9；@之后为163.com、hotmail.com或ecnu.edu.cn。**

**（6）编写函数func\_rand\_telnum，可随机生成长度为11为的手机号，开头为130 131 132 133 134 135 136 137 138 139 186 187 189 151 157。**