**2. The database schema of that system are shown below (Faculty and Staff). Use the data types introduced**

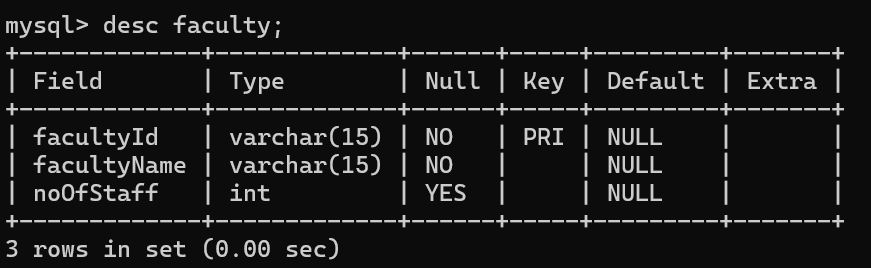
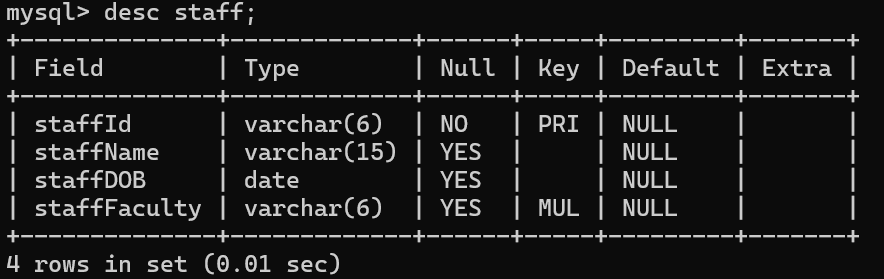
**in the lecture and create the tables for the Staff and Faculty relations. Add constraints to ensure that the**

**facultyName is not NULL. Using appropriate data types create the tables for both of these relation. Make**

**sure that you create the PRIMARY and FOREIGN keys:**

a. STAFF (staffId, staffName, staffDOB, staffFaculty)

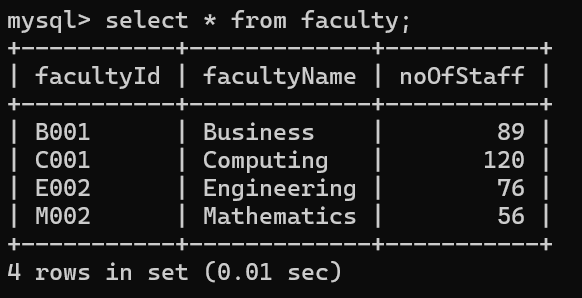
b. FACULTY (facultyId, facultyName, NoOfStaff)

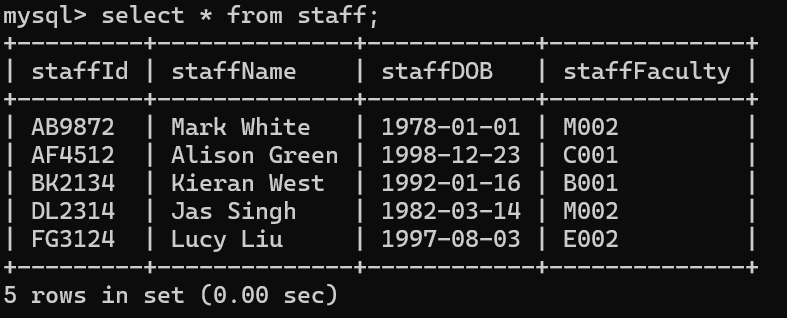


**3. Insert the following data into the tables you have just created. Use Data Manipulation Language (DML)**

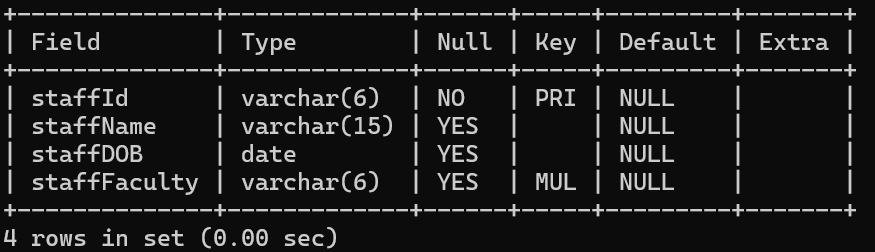
**component of SQL command to populate the tables created. Think about which data has to be populated**

**first and why.**

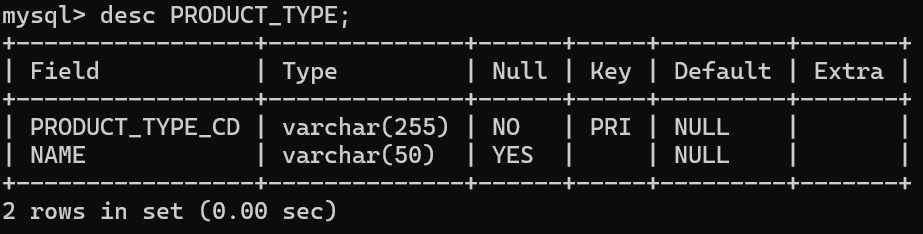


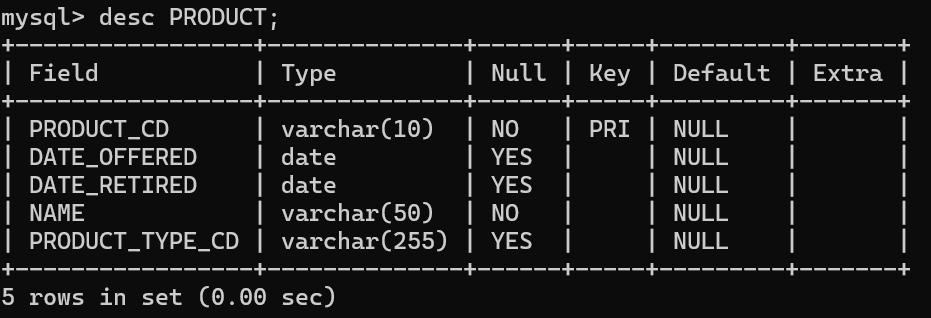


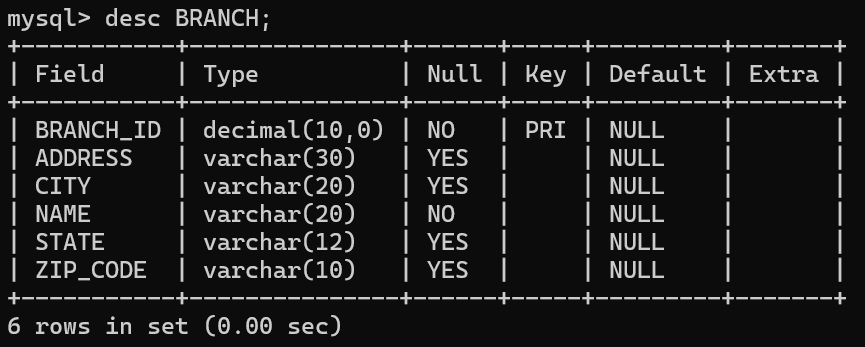
4.

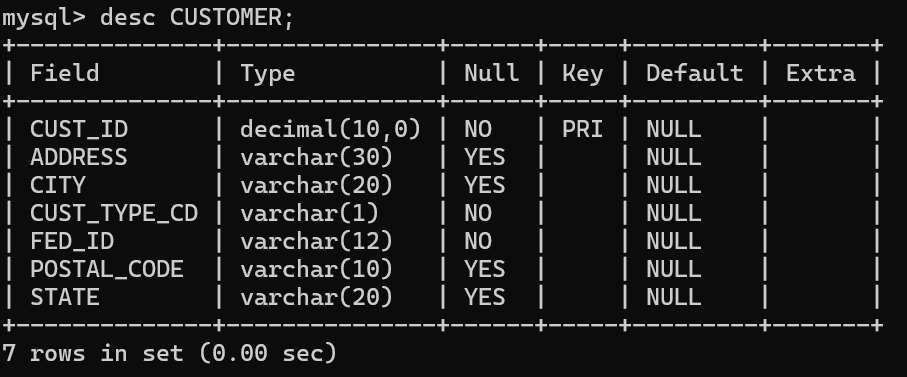


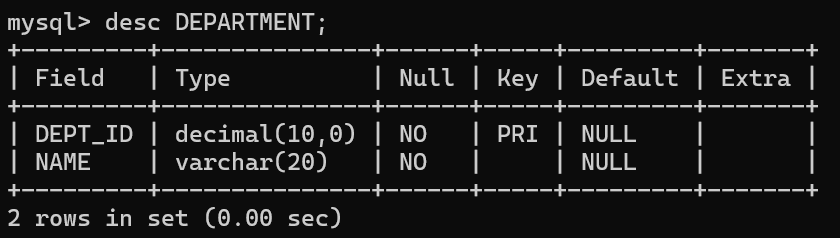
5.

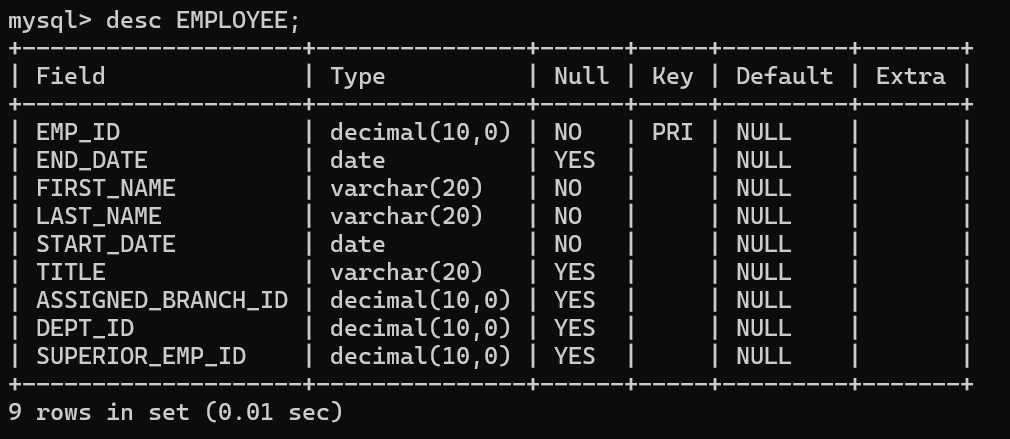


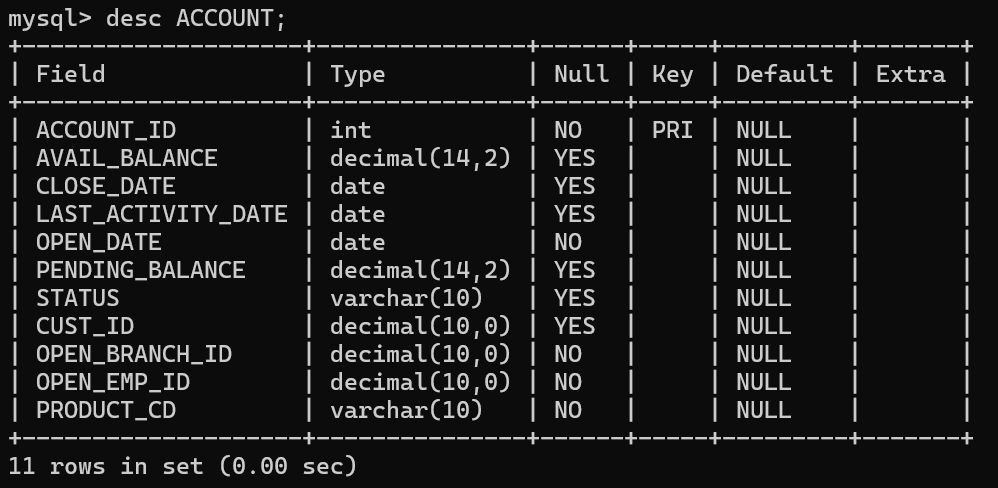


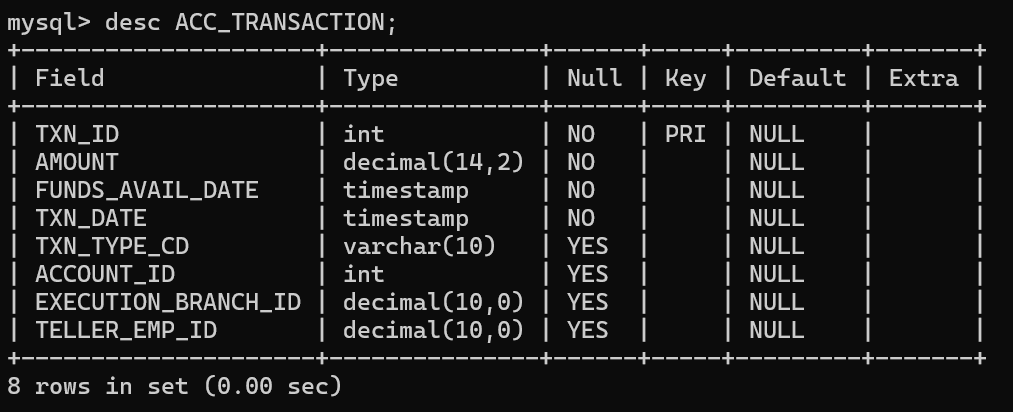


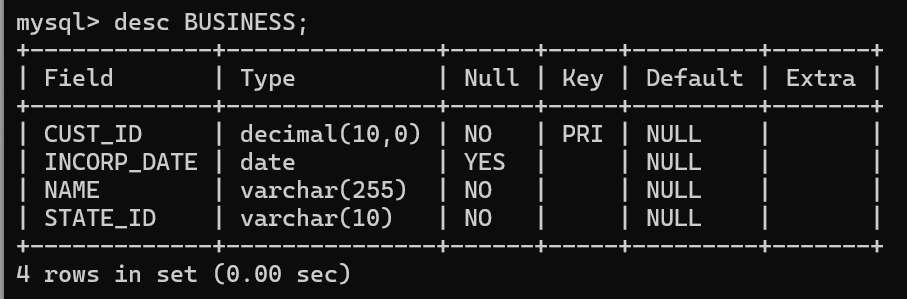


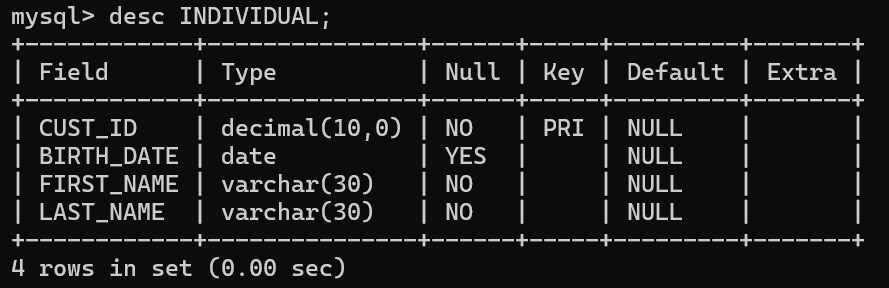


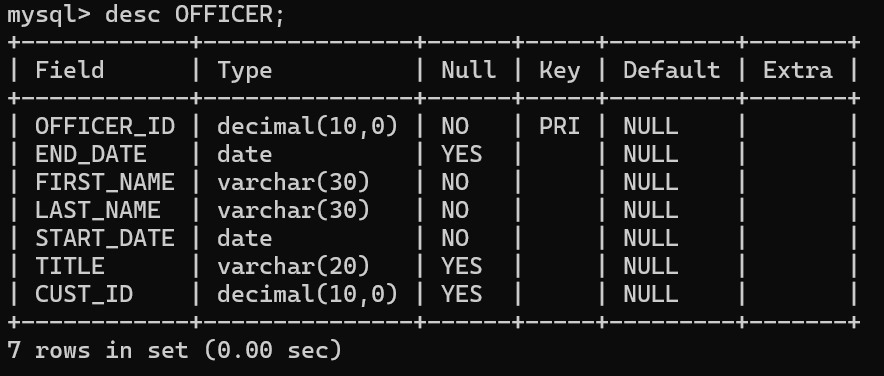






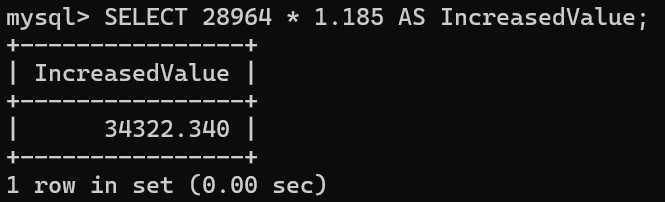




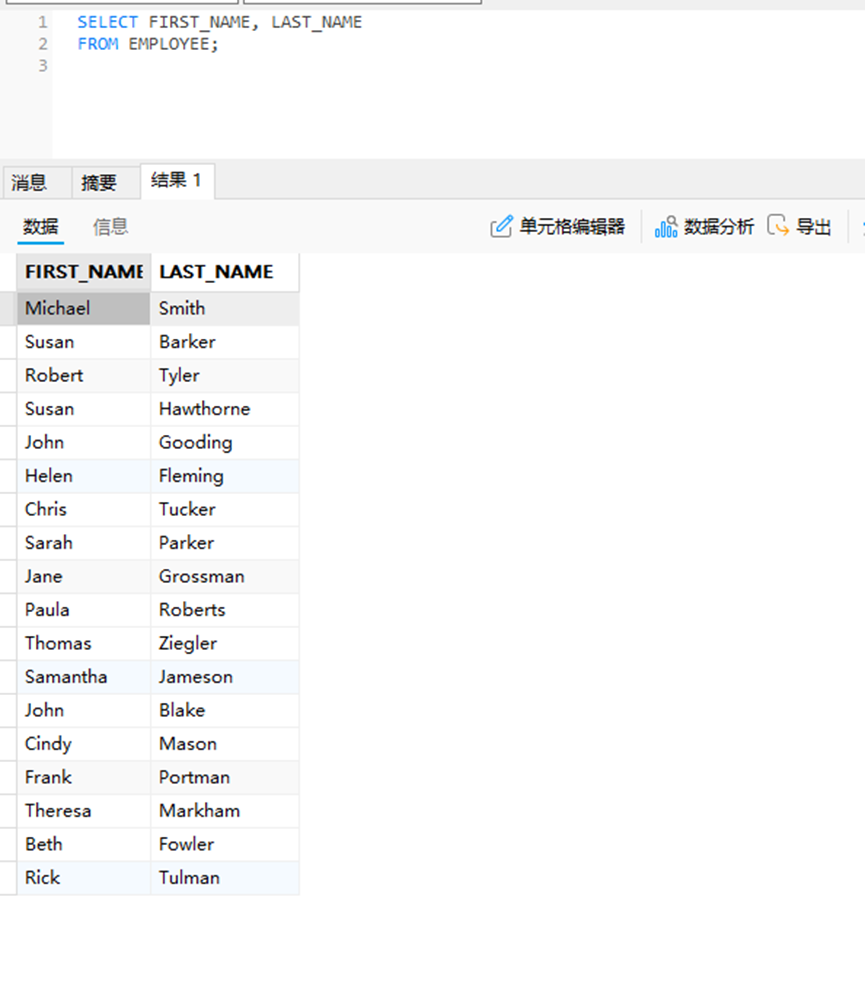


**6.**

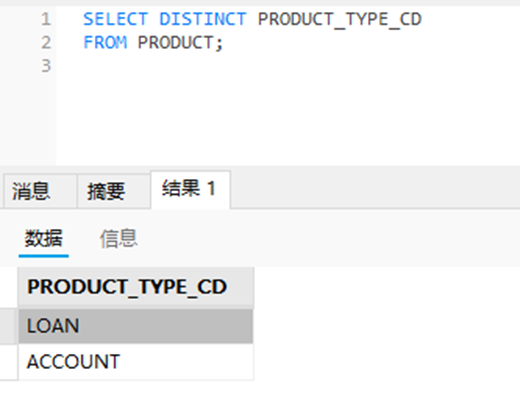
a.



b.



c.



d.



e.



**f.**

SELECT FIRST\_NAME, LAST\_NAME

FROM EMPLOYEE

WHERE (FIRST\_NAME LIKE 'S%' OR FIRST\_NAME LIKE 'T%')

AND DEPT\_ID = (SELECT DEPT\_ID FROM DEPARTMENT WHERE NAME = 'Operations');



**g.**

SELECT EMP\_ID, FIRST\_NAME, LAST\_NAME

FROM EMPLOYEE

WHERE FIRST\_NAME IN ('Susan', 'Helen', 'Paula');



**h.**

SELECT EMP\_ID, FIRST\_NAME, LAST\_NAME, START\_DATE

FROM EMPLOYEE

WHERE START\_DATE BETWEEN '2001-01-01' AND '2002-12-31';

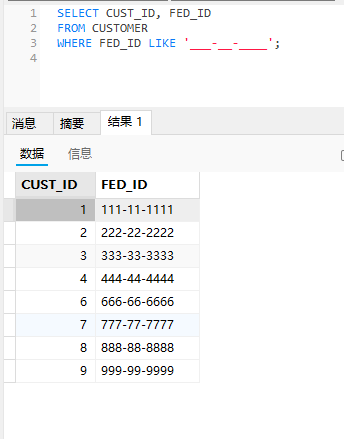


**i.**

SELECT CUST\_ID, FED\_ID

FROM CUSTOMER

WHERE FED\_ID LIKE '\_\_\_-\_\_-\_\_\_\_';

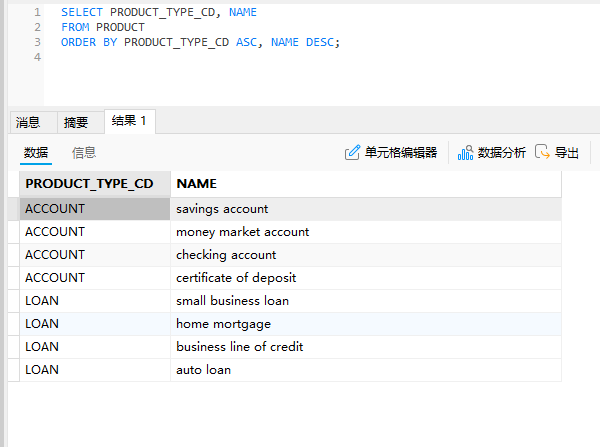


**j.**

SELECT PRODUCT\_TYPE\_CD, NAME

FROM PRODUCT

ORDER BY PRODUCT\_TYPE\_CD ASC, NAME DESC;



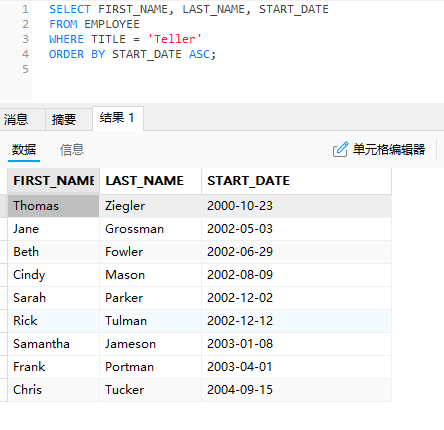
**k.**

SELECT FIRST\_NAME, LAST\_NAME, START\_DATE

FROM EMPLOYEE

WHERE TITLE = 'Teller'

ORDER BY START\_DATE ASC;

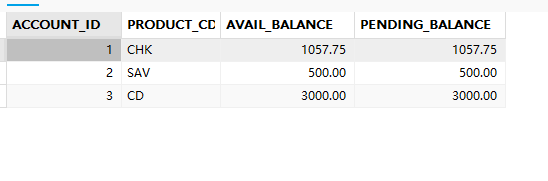


**l.**

SELECT ACCOUNT\_ID, PRODUCT\_CD, AVAILABLE\_BALANCE, PENDING\_BALANCE

FROM ACCOUNTS

WHERE CUST\_ID = 1;



UPDATE ACCOUNTS

SET AVAILABLE\_BALANCE = AVAILABLE\_BALANCE \* 1.02,

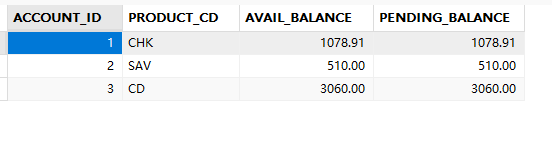
PENDING\_BALANCE = PENDING\_BALANCE \* 1.02

WHERE CUST\_ID = 1;

SELECT ACCOUNT\_ID, PRODUCT\_CD, AVAILABLE\_BALANCE, PENDING\_BALANCE

FROM ACCOUNTS

WHERE CUST\_ID = 1;



**m.**

DELETE FROM acc\_transaction

WHERE TXN\_DATE = '2003-07-30';

SELECT ROW\_COUNT() AS Deleted\_Records;



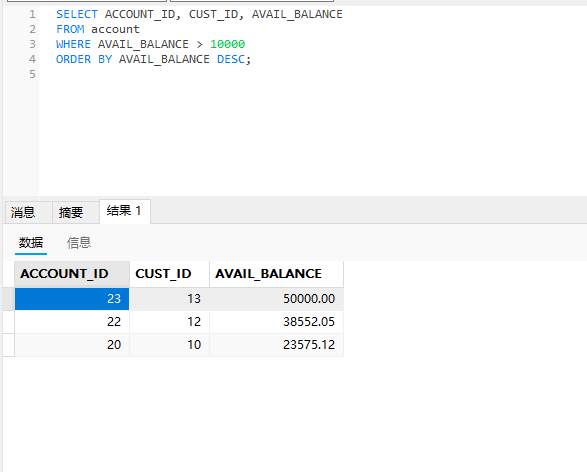
**n.**

SELECT ACCOUNT\_ID, CUST\_ID, AVAILABLE\_BALANCE

FROM ACCOUNTS

WHERE AVAILABLE\_BALANCE > 10000

ORDER BY AVAILABLE\_BALANCE DESC;



**o.**

SELECT DISTINCT CITY

FROM CUSTOMER

WHERE STATE = 'NH'

ORDER BY CITY ASC;



**p.**

UPDATE INDIVIDUAL

SET LAST\_NAME = 'Brown'

WHERE FIRST\_NAME = 'Susan' AND LAST\_NAME = 'Tingley';

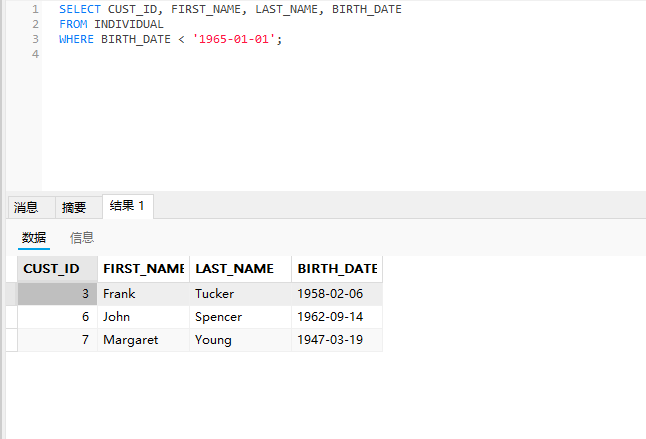


**q.**

SELECT CUST\_ID, FIRST\_NAME, LAST\_NAME, BIRTH\_DATE

FROM INDIVIDUAL

WHERE BIRTH\_DATE < '1965-01-01';



**r.**

UPDATE EMPLOYEE

SET END\_DATE = '2019-11-01'

WHERE FIRST\_NAME = 'Thomas' AND LAST\_NAME = 'Ziegler';



**s.**

SELECT CUST\_ID, AVAILABLE\_BALANCE

FROM ACCOUNTS

WHERE PRODUCT\_CD = 'SAV'

ORDER BY AVAILABLE\_BALANCE DESC;

