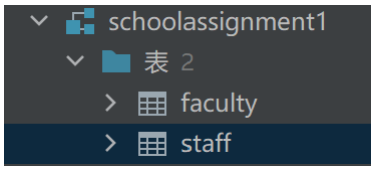
1.



2.

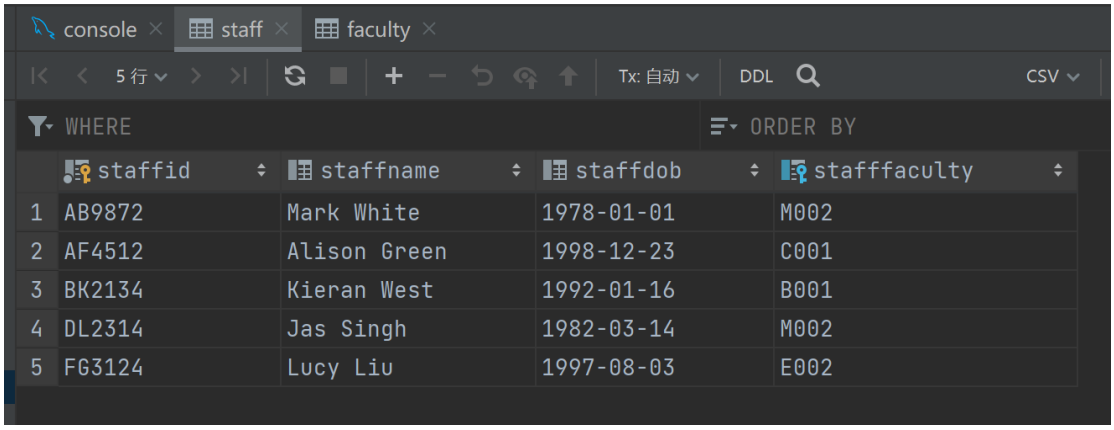
```
CREATE TABLE SchoolAssignment1.`faculty` (
    `facultyid` VARCHAR(6) PRIMARY KEY,
    `facultyname` VARCHAR(15) NOT NULL ,
    `noofstaff` INTEGER
);
```

```
CREATE TABLE SchoolAssignment1.`staff` (
    `staffid` VARCHAR(6) PRIMARY KEY,
    `staffname` VARCHAR(15),
    `staffdob` DATE,
    `stafffaculty` VARCHAR(6),
    FOREIGN KEY (stafffaculty) REFERENCES faculty(facultyid)
);
```

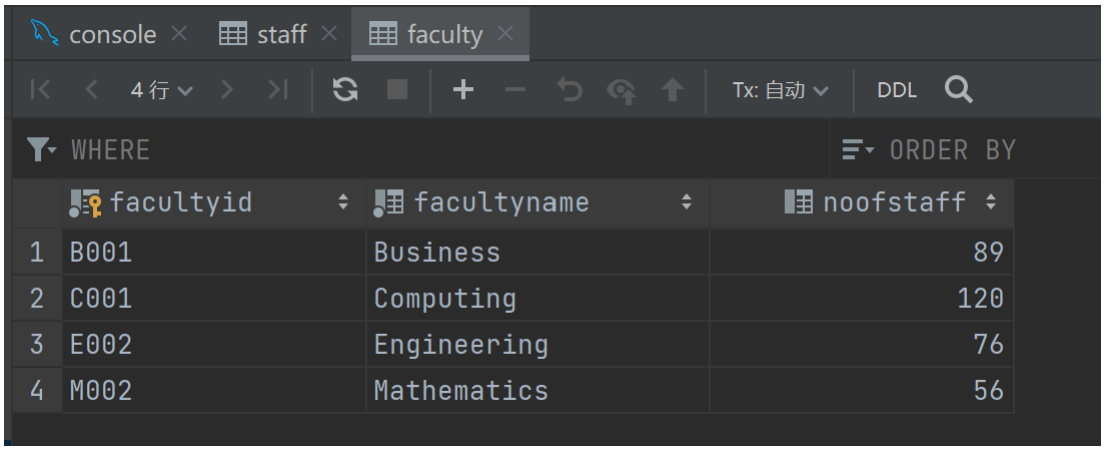
3.

```
INSERT INTO SchoolAssignment1.faculty (facultyid, facultyname, noofstaff)
VALUES ('C001', 'Computing', 120);
INSERT INTO SchoolAssignment1.faculty (facultyid, facultyname, noofstaff)
VALUES ('E002', 'Engineering', 76);
INSERT INTO SchoolAssignment1.faculty (facultyid, facultyname, noofstaff)
VALUES ('M002', 'Mathematics', 56);
INSERT INTO SchoolAssignment1.faculty (facultyid, facultyname, noofstaff)
VALUES ('B001', 'Business', 89);
```

```
INSERT INTO SchoolAssignment1.`staff` (staffid, staffname, staffdob, stafffaculty)
VALUES ('AB9872', 'Mark White', '1978-01-01', 'M002');
INSERT INTO SchoolAssignment1.`staff` (staffid, staffname, staffdob, stafffaculty)
VALUES ('DL2314', 'Jas Singh', '1982-03-14', 'M002');
INSERT INTO SchoolAssignment1.`staff` (staffid, staffname, staffdob, stafffaculty)
VALUES ('AF4512', 'Alison Green', '1998-12-23', 'C001');
INSERT INTO SchoolAssignment1.`staff` (staffid, staffname, staffdob, stafffaculty)
VALUES ('BK2134', 'Kieran West', '1992-01-16', 'B001');
INSERT INTO SchoolAssignment1.`staff` (staffid, staffname, staffdob, stafffaculty)
VALUES ('FG3124', 'Lucy Liu', '1997-08-03', 'E002');
```



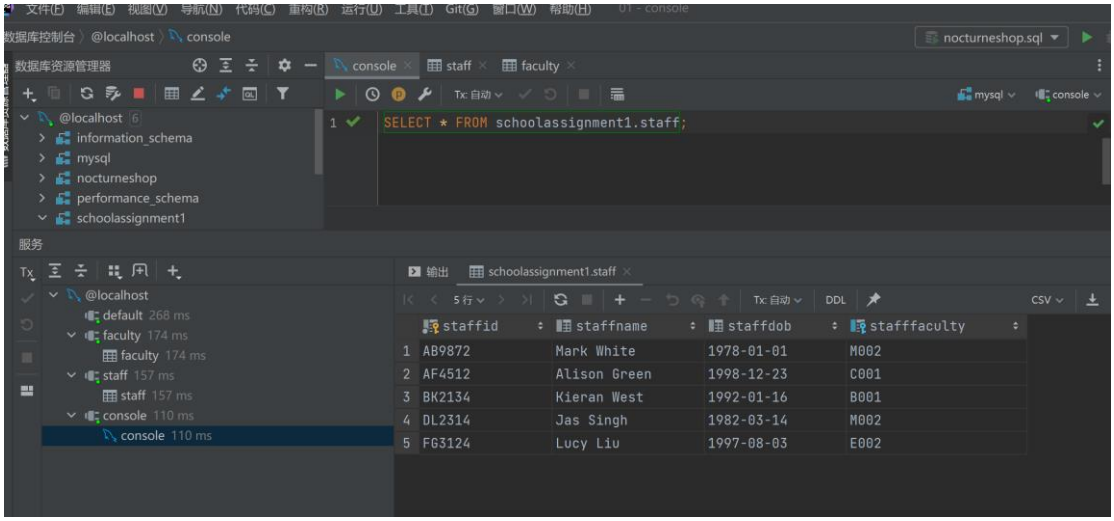
	staffid	staffname	staffdob	stafffaculty
1	AB9872	Mark White	1978-01-01	M002
2	AF4512	Alison Green	1998-12-23	C001
3	BK2134	Kieran West	1992-01-16	B001
4	DL2314	Jas Singh	1982-03-14	M002
5	FG3124	Lucy Liu	1997-08-03	E002



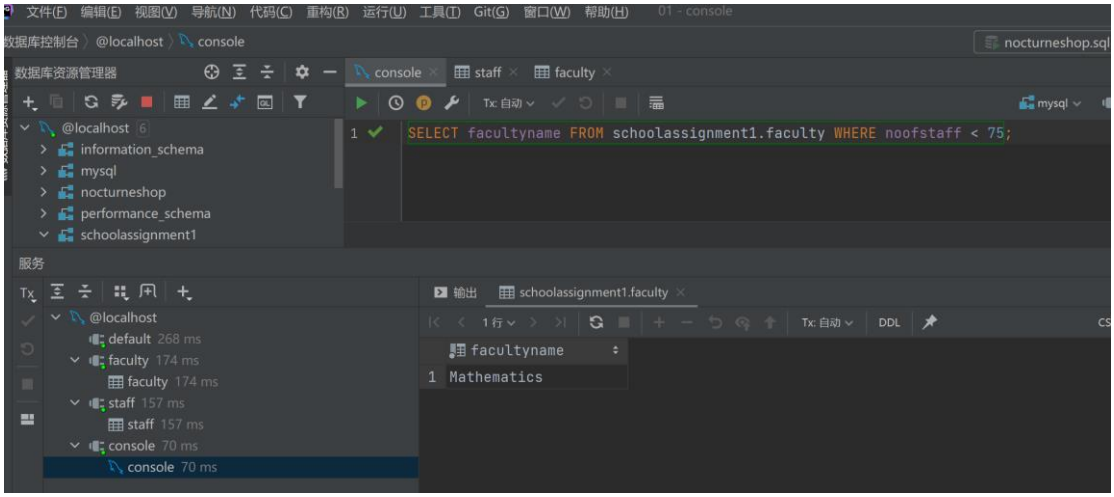
	facultyid	facultyname	noofstaff
1	B001	Business	89
2	C001	Computing	120
3	E002	Engineering	76
4	M002	Mathematics	56

4.

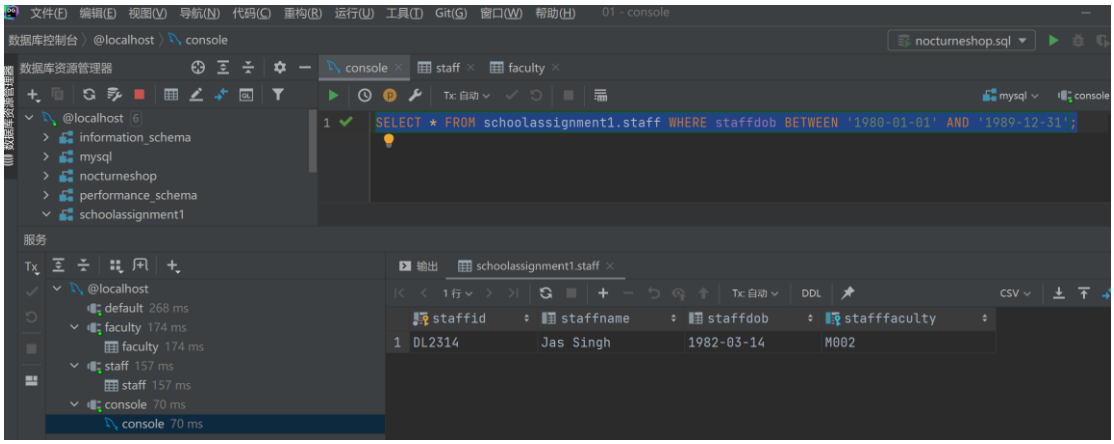
a.



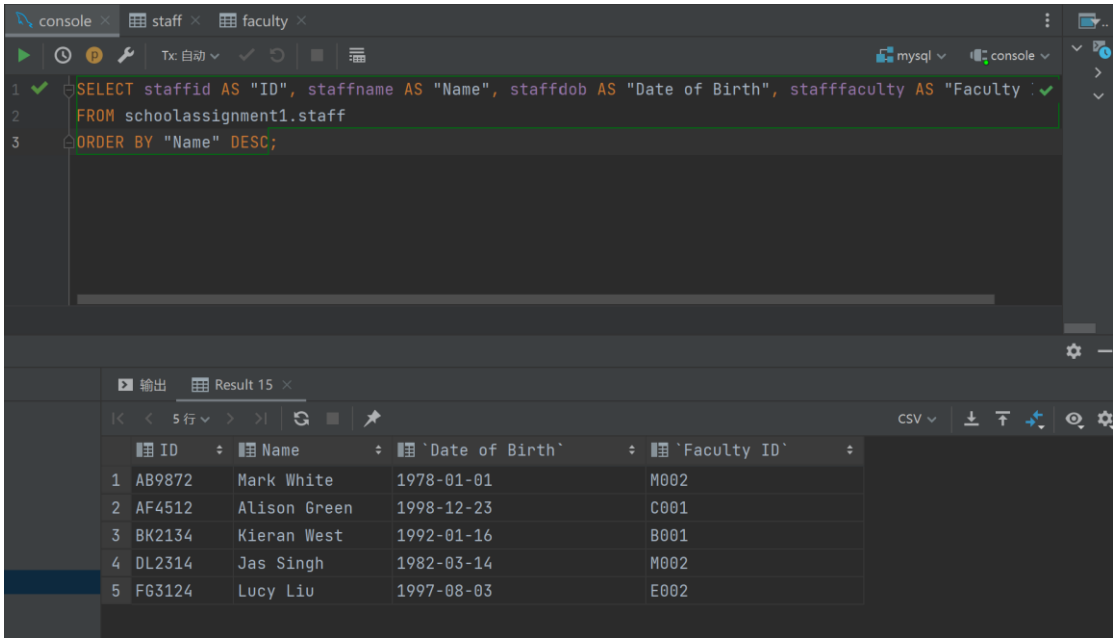
b.


SELECT facultyname FROM schoolassignment1.faculty WHERE noofstaff < 75;
facultyname
1 Mathematics

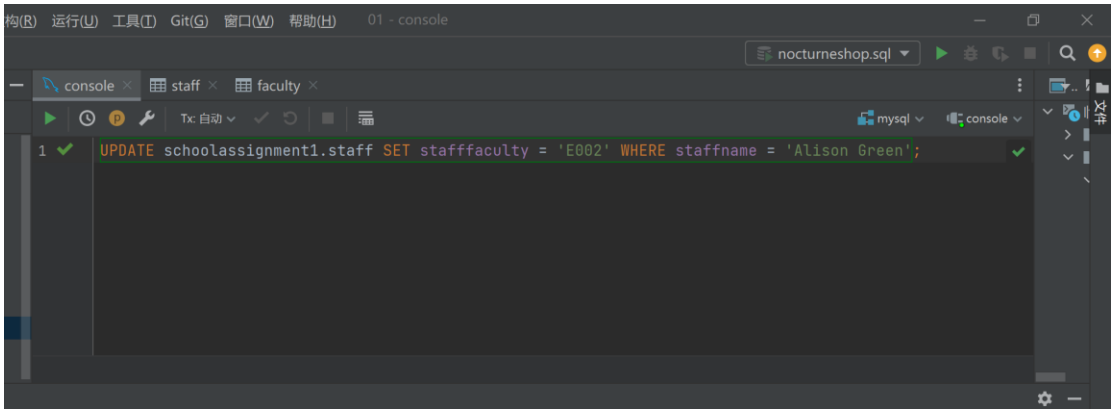
c.

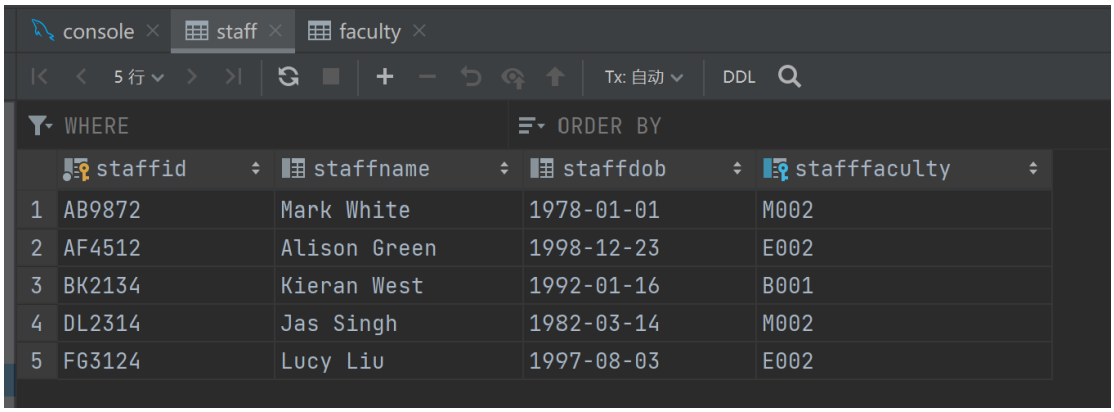

SELECT * FROM schoolassignment1.staff WHERE staffdob BETWEEN '1980-01-01' AND '1989-12-31';
staffid
staffname
staffdob
staffffaculty
1 DL2314 Jas Singh 1982-03-14 M002

d.

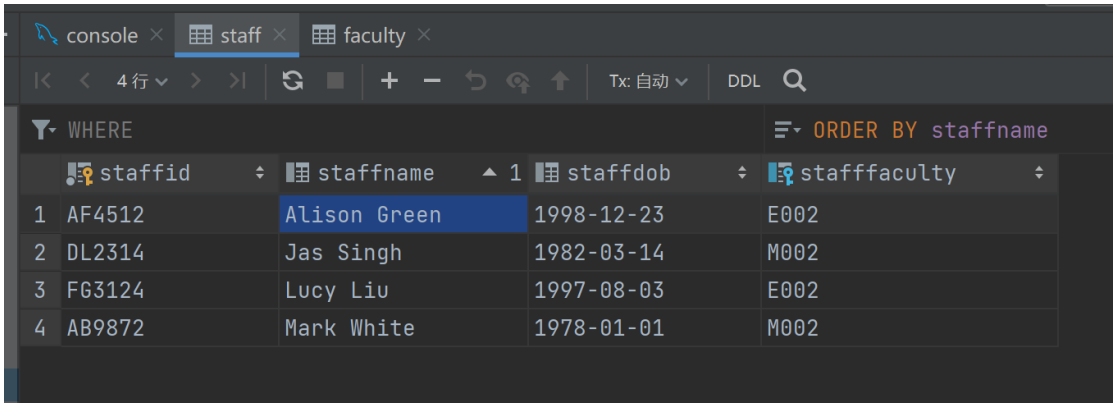

SELECT staffid AS "ID", staffname AS "Name", staffdob AS "Date of Birth", staffffaculty AS "Faculty
FROM schoolassignment1.staff
ORDER BY "Name" DESC;
ID
Name
`Date of Birth`
`Faculty ID`
1 AB9872 Mark White 1978-01-01 M002
2 AF4512 Alison Green 1998-12-23 C001
3 BK2134 Kieran West 1992-01-16 B001
4 DL2314 Jas Singh 1982-03-14 M002
5 FG3124 Lucy Liu 1997-08-03 E002

e.


构(R) 运行(U) 工具(T) Git(G) 窗口(W) 帮助(H) 01 - console
nocturneshop.sql
console
staff
faculty
Tx: 自动
mysql
console
1
UPDATE schoolassignment1.staff SET stafffaculty = 'E002' WHERE staffname = 'Alison Green';


console
staff
faculty
5 行
Tx: 自动
DDL
WHERE
ORDER BY
staffid
staffname
staffdob
stafffaculty
1 AB9872 Mark White 1978-01-01 M002
2 AF4512 Alison Green 1998-12-23 E002
3 BK2134 Kieran West 1992-01-16 B001
4 DL2314 Jas Singh 1982-03-14 M002
5 FG3124 Lucy Liu 1997-08-03 E002

f.


console
staff
faculty
4 行
Tx: 自动
DDL
WHERE
ORDER BY staffname
staffid
staffname
1
staffdob
stafffaculty
1 AF4512 Alison Green 1998-12-23 E002
2 DL2314 Jas Singh 1982-03-14 M002
3 FG3124 Lucy Liu 1997-08-03 E002
4 AB9872 Mark White 1978-01-01 M002

5.

```sql
CREATE TABLE bank.`ACCOUNT` (
    `ACCOUNT_ID` INTEGER PRIMARY KEY AUTO_INCREMENT,
    `AVAIL_BALANCE` DECIMAL(14,2),
    `CLOSE_DATE` DATE,
    `LAST_ACTIVITY_DATE` DATE,
    `OPEN_DATE` DATE NOT NULL,
    `PENDING_BALANCE` DECIMAL(14,2),
    `STATUS` VARCHAR(10),
    `CUST_ID` INTEGER,
    `OPEN_BRANCHID`INTEGER NOT NULL,
    `OPEN_EMP_ID` INTEGER NOT NULL,
    `PRODUCTCD` VARCHAR(10),
    FOREIGN KEY (CUST_ID) REFERENCES CUSTOMER(CUST_ID),
    FOREIGN KEY (OPEN_BRANCHID) REFERENCES BRANCH(BRANCH_ID),
    FOREIGN KEY (OPEN_EMP_ID) REFERENCES EMPLOYEE(EMP_ID),
    FOREIGN KEY (PRODUCTCD) REFERENCES PRODUCT(PRODUCT_CD)
);
```

```sql
CREATE TABLE bank.ACC_TRANSACTION (
    TXN_ID INTEGER PRIMARY KEY AUTO_INCREMENT,
    AMOUNT DECIMAL(14,2) NOT NULL,
    FUNDS_AVAIL_DATE TIMESTAMP NOT NULL,
    TXN_DATE TIMESTAMP NOT NULL,
    TXN_TYPE_CD VARCHAR(10),
    ACCOUNT_ID INTEGER,
    EXECUTION_BRANCH_ID INTEGER,
    TELLER_EMP_ID INTEGER

);
```

```sql
CREATE TABLE BUSINESS (
    CUST_ID INTEGER PRIMARY KEY,
    INCORP_DATE DATE,
    NAME VARCHAR(255) NOT NULL,
    STATE_ID VARCHAR(10) NOT NULL
);
```

```sql
CREATE TABLE BRANCH (
    BRANCH_ID INTEGER PRIMARY KEY,
    ADDRESS VARCHAR(30),
    CITY VARCHAR(20),
    NAME VARCHAR(20) NOT NULL,
    STATE VARCHAR(12),
    ZIP_CODE VARCHAR(10)
);
```

```sql
CREATE TABLE CUSTOMER (
    CUST_ID INTEGER PRIMARY KEY,
    ADDRESS VARCHAR(30),
    CITY VARCHAR(20),
    CUST_TYPE_CD VARCHAR(1) NOT NULL,
    FED_ID VARCHAR(12) NOT NULL,
    POSTAL_CODE VARCHAR(10),
    STATE VARCHAR(20)
);
```

```sql
CREATE TABLE DEPARTMENT (
    DEPT_ID INTEGER PRIMARY KEY,
    NAME VARCHAR(20) NOT NULL
);
```

```sql
CREATE TABLE EMPLOYEE (
    EMP_ID INTEGER PRIMARY KEY,
    END_DATE DATE,
    FIRST_NAME VARCHAR(20) NOT NULL,
    LAST_NAME VARCHAR(20) NOT NULL,
    START_DATE DATE NOT NULL,
    TITLE VARCHAR(20),
    ASSIGNED_BRANCH_ID INTEGER,
    DEPT_ID INTEGER,
    SUPERIOR_EMP_ID INTEGER,
    FOREIGN KEY (ASSIGNED_BRANCH_ID) REFERENCES BRANCH(BRANCH_ID),
    FOREIGN KEY (DEPT_ID) REFERENCES DEPARTMENT(DEPT_ID),
    FOREIGN KEY (SUPERIOR_EMP_ID) REFERENCES EMPLOYEE(EMP_ID)
);
```

```sql
CREATE TABLE INDIVIDUAL (
    CUST_ID INTEGER PRIMARY KEY,
    BIRTH_DATE DATE,
    FIRST_NAME VARCHAR(30) NOT NULL,
    LAST_NAME VARCHAR(30) NOT NULL,
    FOREIGN KEY (CUST_ID) REFERENCES CUSTOMER(CUST_ID)
);
```

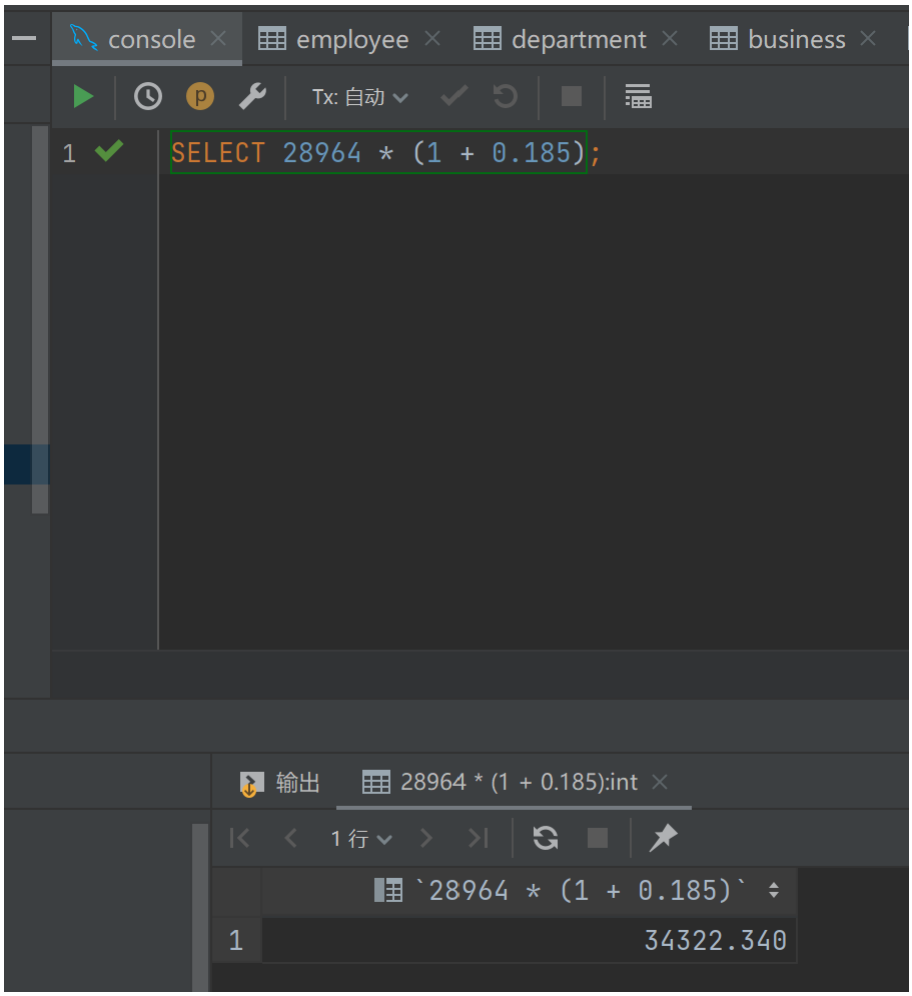
```sql
CREATE TABLE OFFICER (
    OFFICER_ID INTEGER PRIMARY KEY,
    END_DATE DATE,
    FIRST_NAME VARCHAR(30) NOT NULL,
    LAST_NAME VARCHAR(30) NOT NULL,
    START_DATE DATE NOT NULL,
    TITLE VARCHAR(20),
    CUST_ID INTEGER,
    FOREIGN KEY (CUST_ID) REFERENCES CUSTOMER(CUST_ID)
);
```

```sql
CREATE TABLE PRODUCT (
    PRODUCT_CD VARCHAR(10) PRIMARY KEY,
    DATE_OFFERED DATE,
    DATE_RETIRED DATE,
    NAME VARCHAR(50) NOT NULL,
    PRODUCT_TYPE_CD VARCHAR(255)
);
```

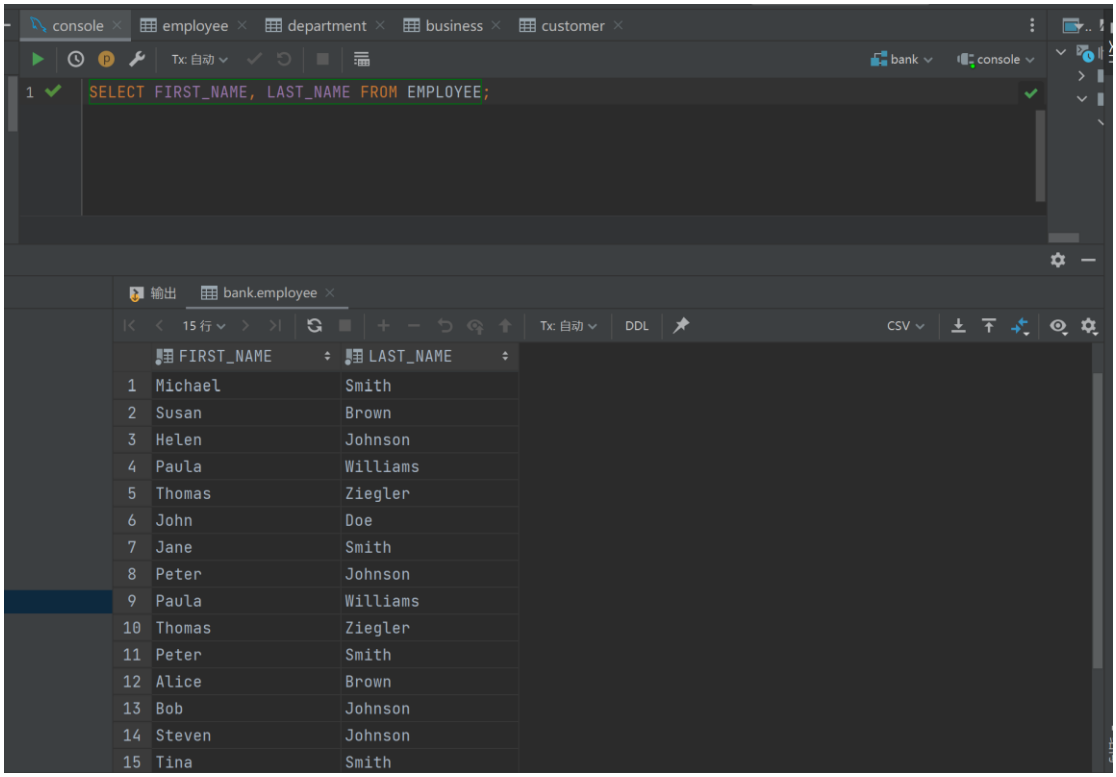
```sql
CREATE TABLE PRODUCT_TYPE (
    PRODUCT_TYPE_CD VARCHAR(255) PRIMARY KEY,
    NAME VARCHAR(50)
);
```

6.

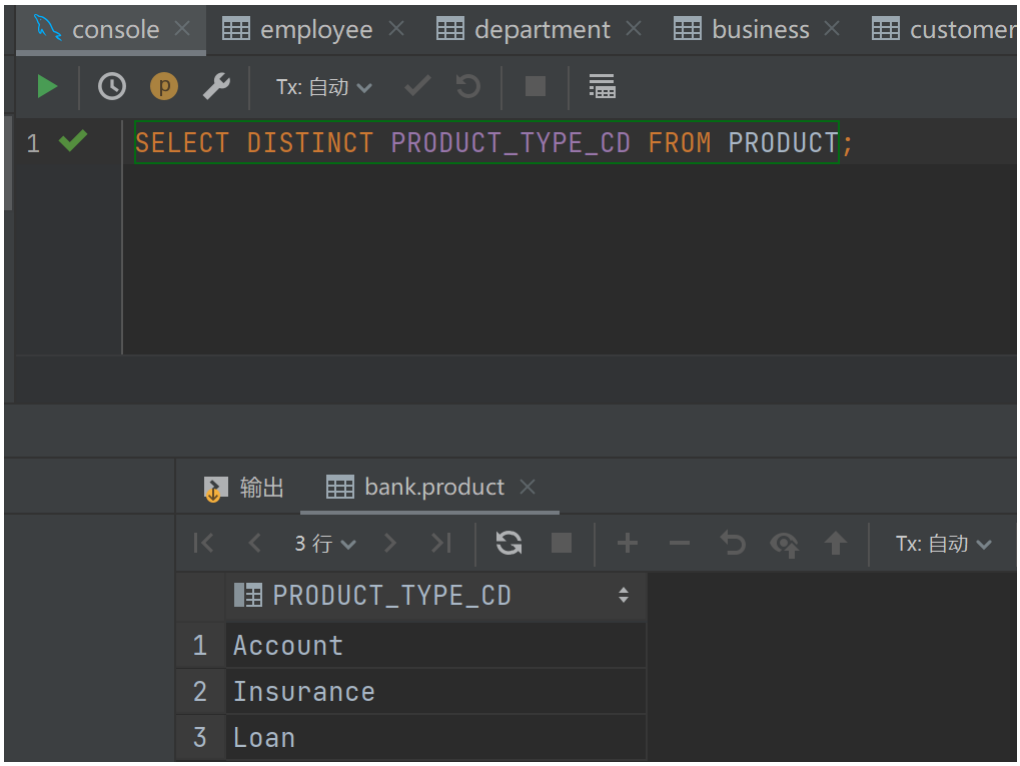
a.


console
employee
department
business
Tx: 自动
1
SELECT 28964 * (1 + 0.185);
输出
28964 * (1 + 0.185):int
1 行
`28964 * (1 + 0.185)`
1
34322.340

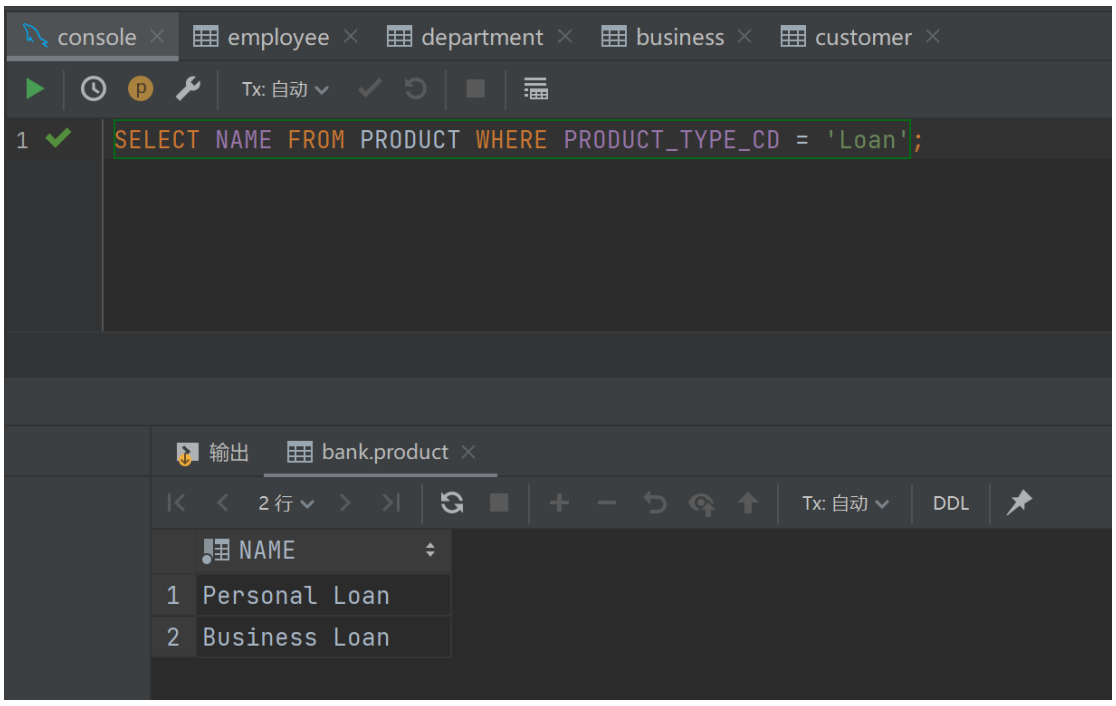
b.


console
employee
department
business
customer
Tx: 自动
bank
console
1
SELECT FIRST_NAME, LAST_NAME FROM EMPLOYEE;
输出
bank.employee
15 行
Tx: 自动
DDL
CSV
FIRST_NAME
LAST_NAME
1 Michael Smith
2 Susan Brown
3 Helen Johnson
4 Paula Williams
5 Thomas Ziegler
6 John Doe
7 Jane Smith
8 Peter Johnson
9 Paula Williams
10 Thomas Ziegler
11 Peter Smith
12 Alice Brown
13 Bob Johnson
14 Steven Johnson
15 Tina Smith

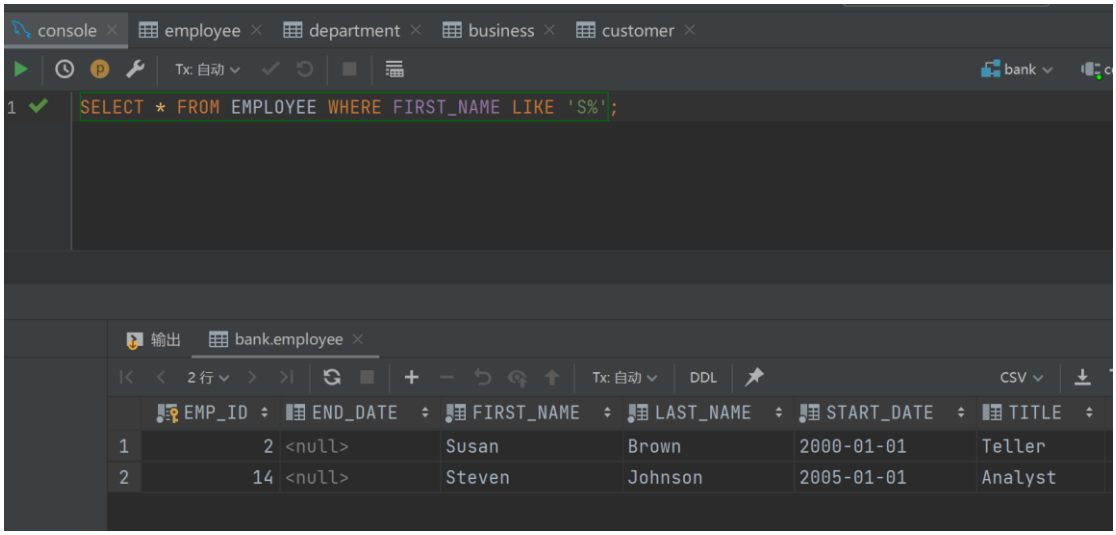
c.


console
employee
department
business
customer
Tx: 自动
1
SELECT DISTINCT PRODUCT_TYPE_CD FROM PRODUCT;
输出
bank.product
3 行
Tx: 自动
PRODUCT_TYPE_CD
1 Account
2 Insurance
3 Loan

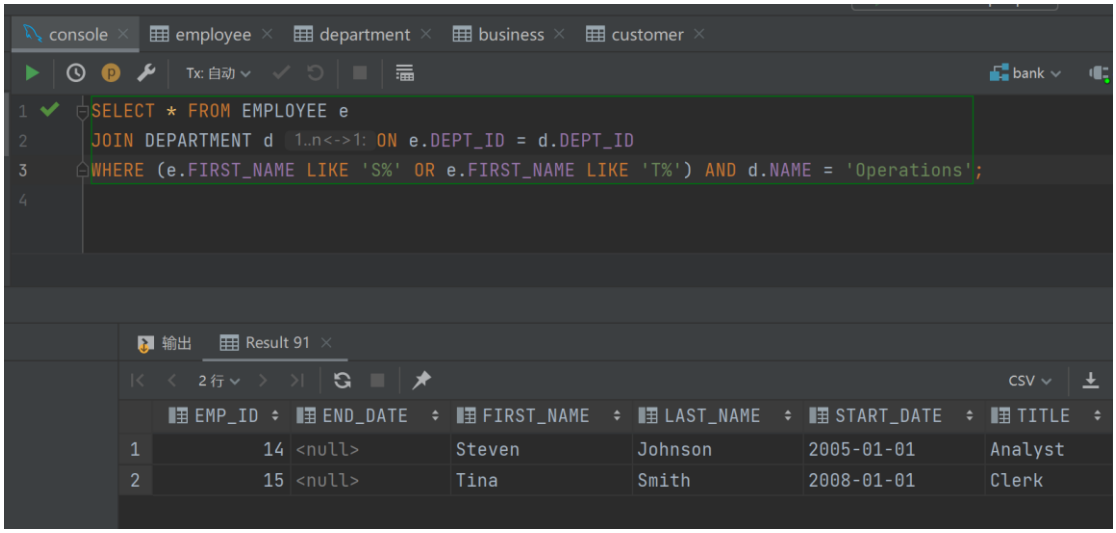
d.


console
employee
department
business
customer
Tx: 自动
1
SELECT NAME FROM PRODUCT WHERE PRODUCT_TYPE_CD = 'Loan';
输出
bank.product
2 行
Tx: 自动
DDL
NAME
1 Personal Loan
2 Business Loan

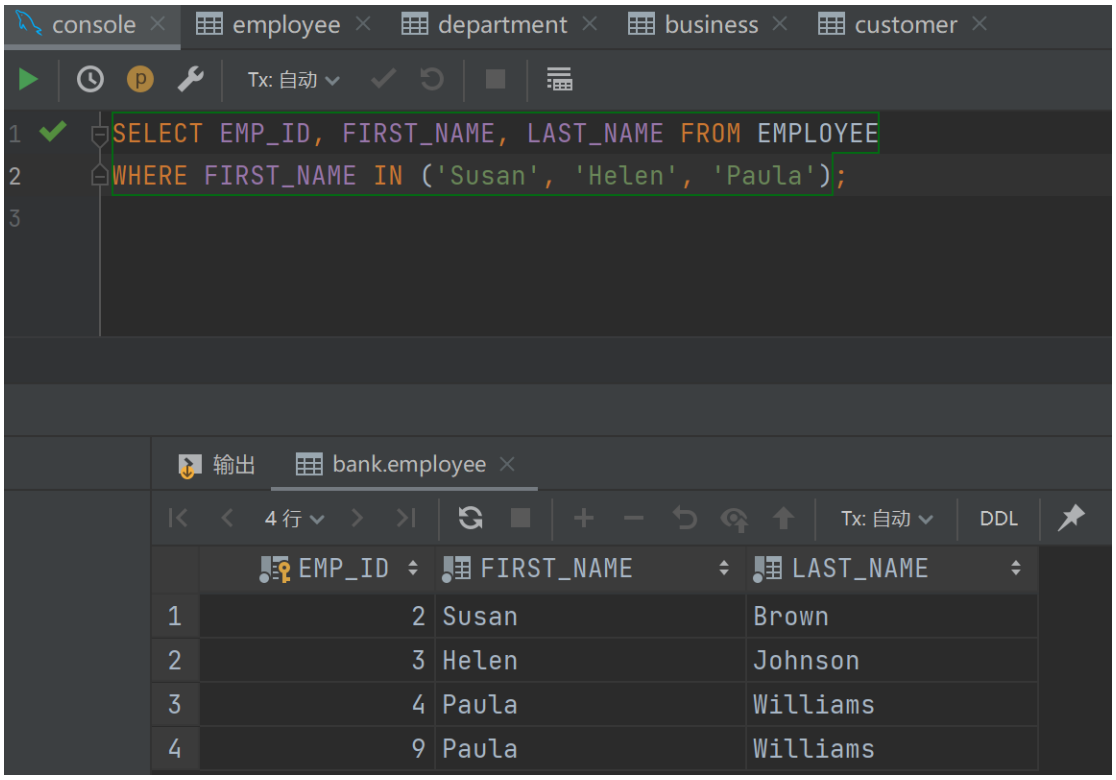
e.


console
employee
department
business
customer
Tx: 自动
bank
SELECT * FROM EMPLOYEE WHERE FIRST_NAME LIKE 'S%';
输出
bank.employee
2 行
Tx: 自动
DDL
CSV
EMP_ID
END_DATE
FIRST_NAME
LAST_NAME
START_DATE
TITLE
1 2 <null> Susan Brown 2000-01-01 Teller
2 14 <null> Steven Johnson 2005-01-01 Analyst

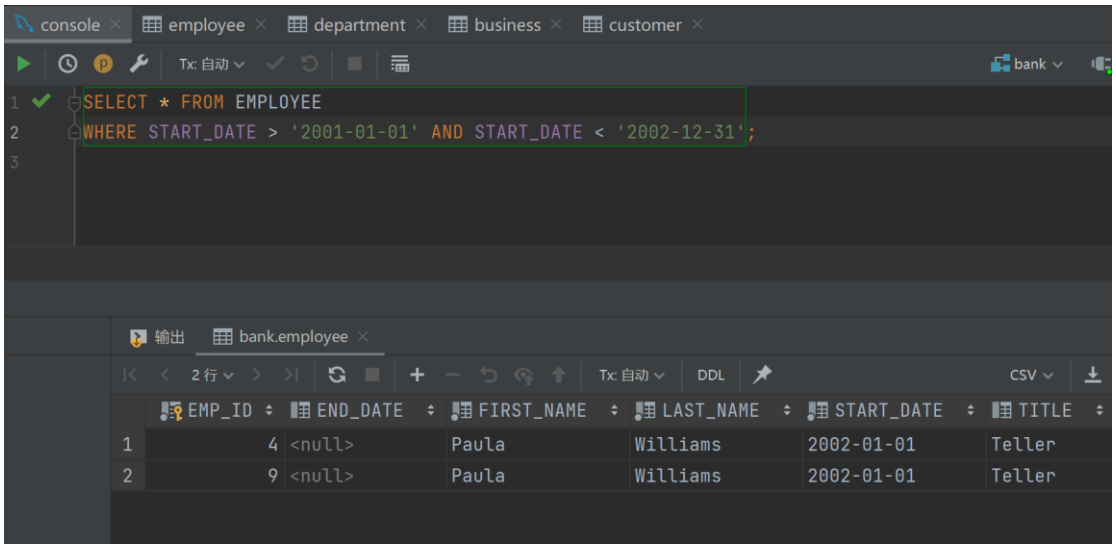
f.


console
employee
department
business
customer
Tx: 自动
bank
SELECT * FROM EMPLOYEE e
JOIN DEPARTMENT d 1..n<->1: ON e.DEPT_ID = d.DEPT_ID
WHERE (e.FIRST_NAME LIKE 'S%' OR e.FIRST_NAME LIKE 'T%') AND d.NAME = 'Operations';
输出
Result 91
2 行
CSV
EMP_ID
END_DATE
FIRST_NAME
LAST_NAME
START_DATE
TITLE
1 14 <null> Steven Johnson 2005-01-01 Analyst
2 15 <null> Tina Smith 2008-01-01 Clerk

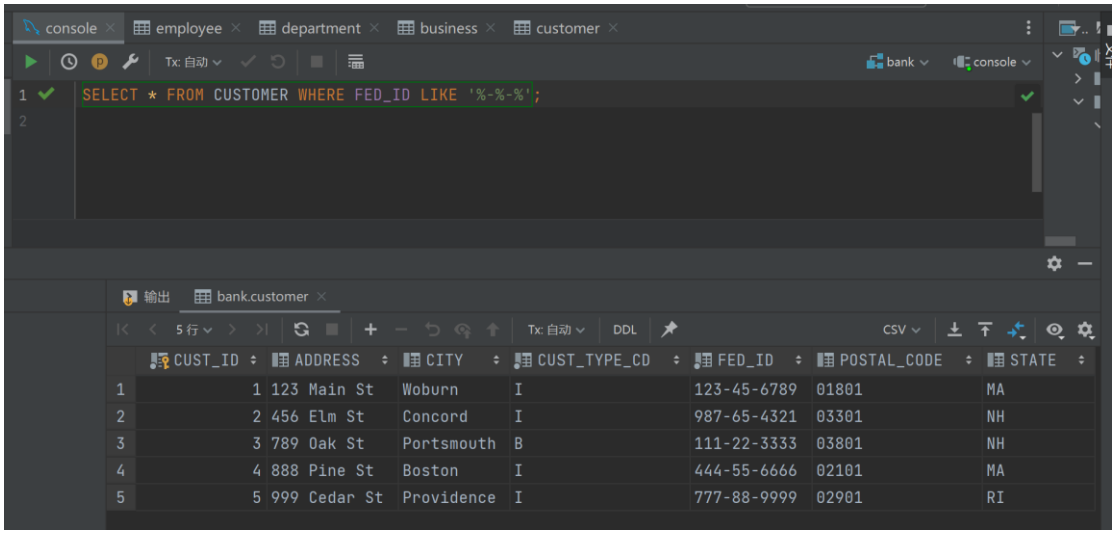
g.


console
employee
department
business
customer
Tx: 自动
SELECT EMP_ID, FIRST_NAME, LAST_NAME FROM EMPLOYEE
WHERE FIRST_NAME IN ('Susan', 'Helen', 'Paula');
输出
bank.employee
4 行
Tx: 自动
DDL
EMP_ID FIRST_NAME LAST_NAME
1 2 Susan Brown
2 3 Helen Johnson
3 4 Paula Williams
4 9 Paula Williams

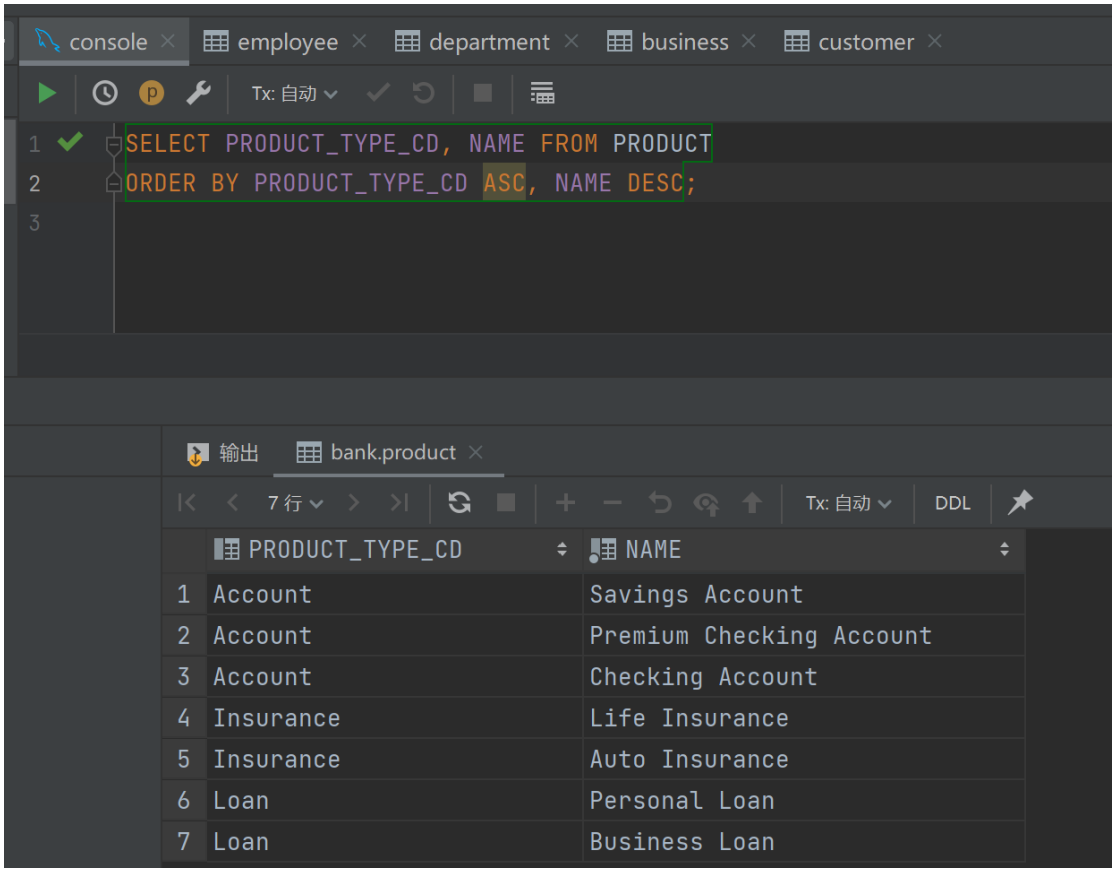
h.


console
employee
department
business
customer
Tx: 自动
bank
SELECT * FROM EMPLOYEE
WHERE START_DATE > '2001-01-01' AND START_DATE < '2002-12-31';
输出
bank.employee
2 行
Tx: 自动
DDL
CSV
EMP_ID END_DATE FIRST_NAME LAST_NAME START_DATE TITLE
1 4 <null> Paula Williams 2002-01-01 Teller
2 9 <null> Paula Williams 2002-01-01 Teller

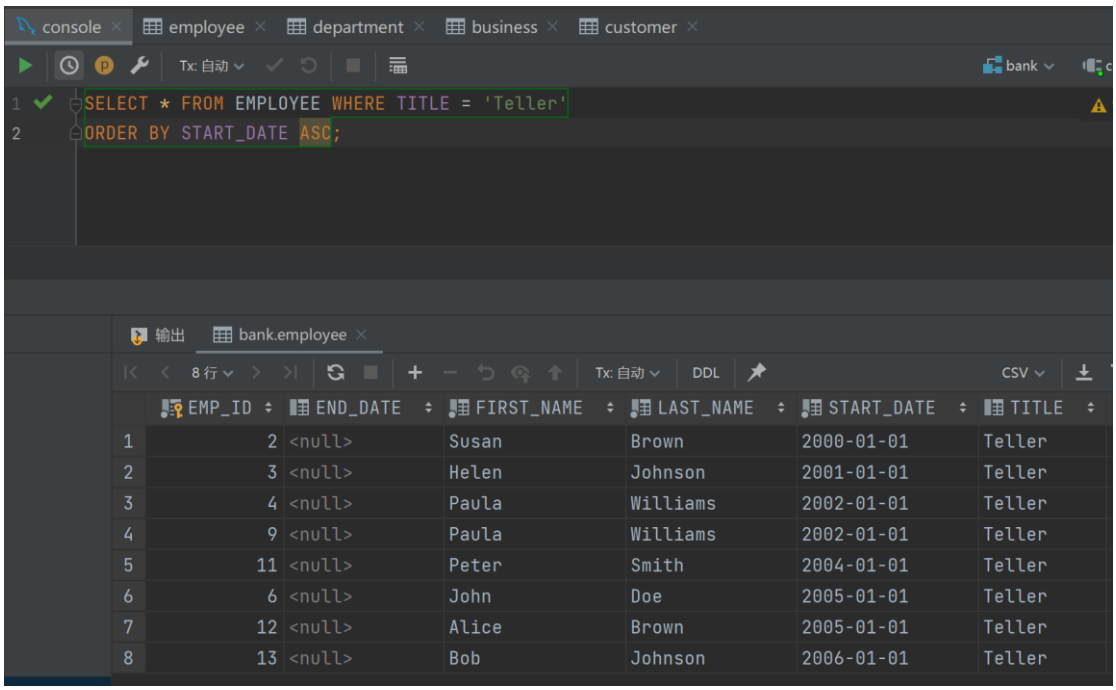
i.


console
employee
department
business
customer
SELECT * FROM CUSTOMER WHERE FED_ID LIKE '%-%-%';
输出
bank.customer
CUST_ID ADDRESS CITY CUST_TYPE_CD FED_ID POSTAL_CODE STATE
1 1 123 Main St Woburn I 123-45-6789 01801 MA
2 2 456 Elm St Concord I 987-65-4321 03301 NH
3 3 789 Oak St Portsmouth B 111-22-3333 03801 NH
4 4 888 Pine St Boston I 444-55-6666 02101 MA
5 5 999 Cedar St Providence I 777-88-9999 02901 RI

j.

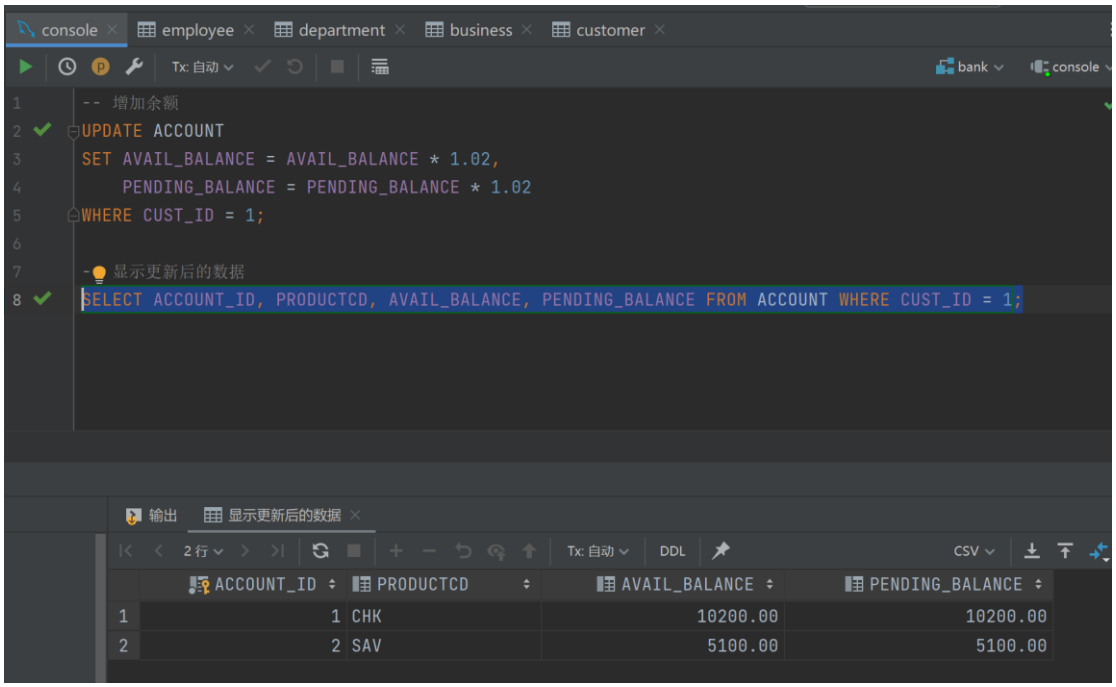

console
employee
department
business
customer
SELECT PRODUCT_TYPE_CD, NAME FROM PRODUCT
ORDER BY PRODUCT_TYPE_CD ASC, NAME DESC;
输出
bank.product
7 行
Tx: 自动
DDL
PRODUCT_TYPE_CD NAME
1 Account Savings Account
2 Account Premium Checking Account
3 Account Checking Account
4 Insurance Life Insurance
5 Insurance Auto Insurance
6 Loan Personal Loan
7 Loan Business Loan

k.



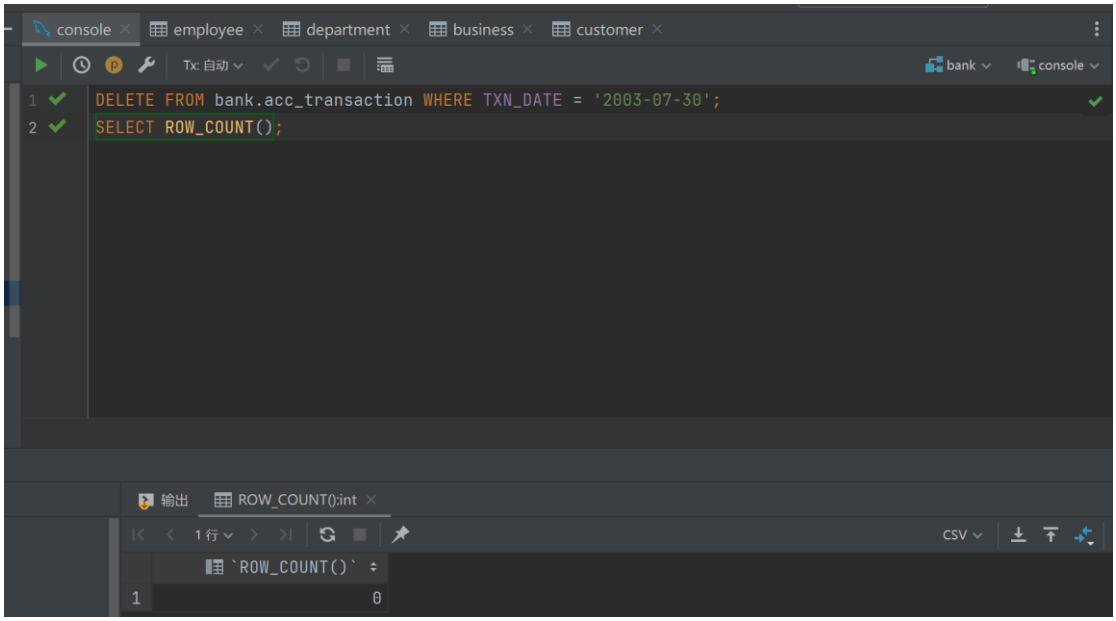
	EMP_ID	END_DATE	FIRST_NAME	LAST_NAME	START_DATE	TITLE
1	2	<null>	Susan	Brown	2000-01-01	Teller
2	3	<null>	Helen	Johnson	2001-01-01	Teller
3	4	<null>	Paula	Williams	2002-01-01	Teller
4	9	<null>	Paula	Williams	2002-01-01	Teller
5	11	<null>	Peter	Smith	2004-01-01	Teller
6	6	<null>	John	Doe	2005-01-01	Teller
7	12	<null>	Alice	Brown	2005-01-01	Teller
8	13	<null>	Bob	Johnson	2006-01-01	Teller

l.

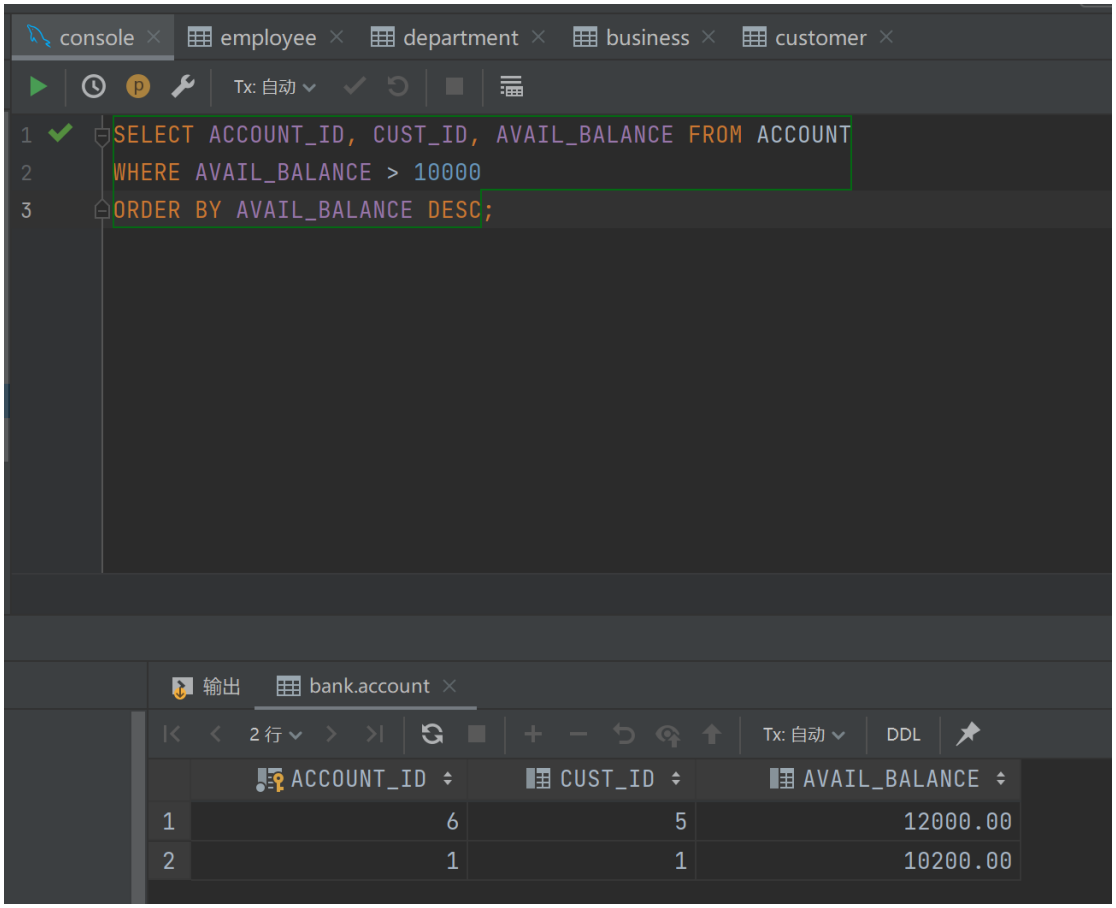


	ACCOUNT_ID	PRODUCTCD	AVAIL_BALANCE	PENDING_BALANCE
1	1	CHK	10200.00	10200.00
2	2	SAV	5100.00	5100.00

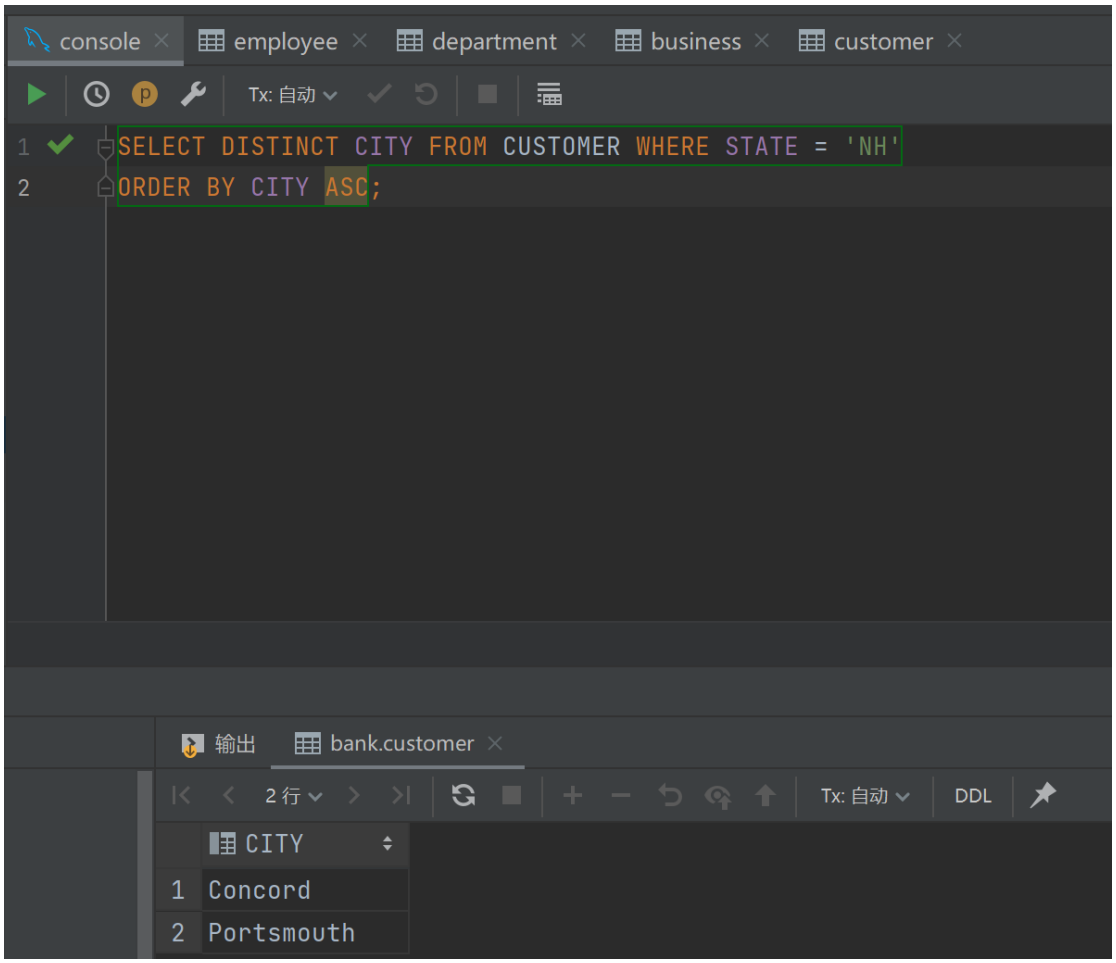
m.


console
employee
department
business
customer
Tx: 自动
bank
console
1 DELETE FROM bank.acc_transaction WHERE TXN_DATE = '2003-07-30';
2 SELECT ROW_COUNT();
输出
ROW_COUNT():int
1 行
CSV
`ROW_COUNT()`
1
0

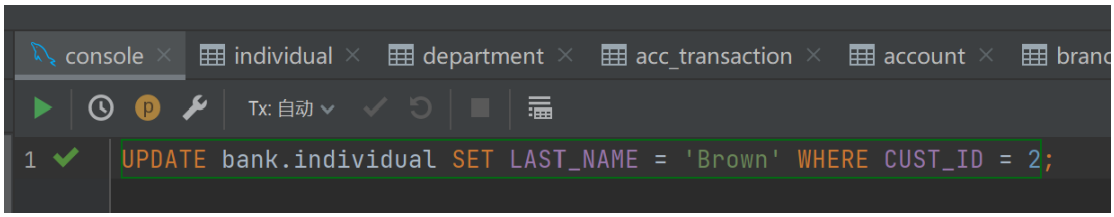
n.

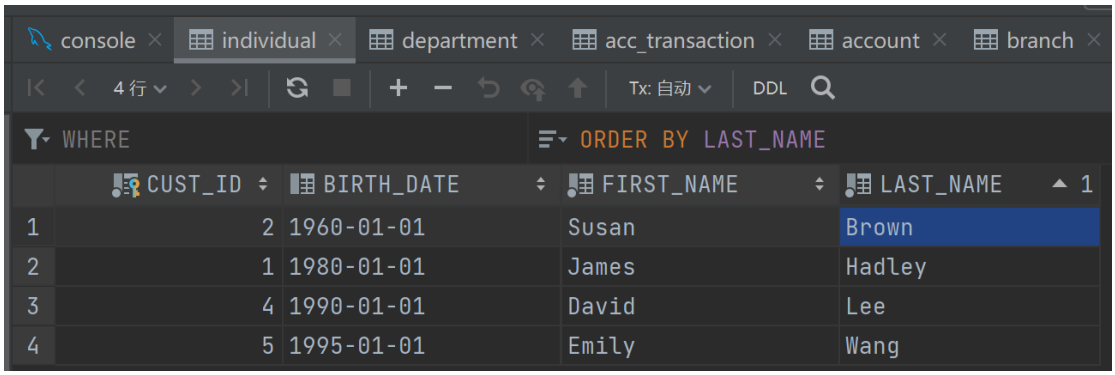

console
employee
department
business
customer
Tx: 自动
1 SELECT ACCOUNT_ID, CUST_ID, AVAIL_BALANCE FROM ACCOUNT
2 WHERE AVAIL_BALANCE > 10000
3 ORDER BY AVAIL_BALANCE DESC;
输出
bank.account
2 行
Tx: 自动
DDL
ACCOUNT_ID
CUST_ID
AVAIL_BALANCE
1 6 5 12000.00
2 1 1 10200.00

o.

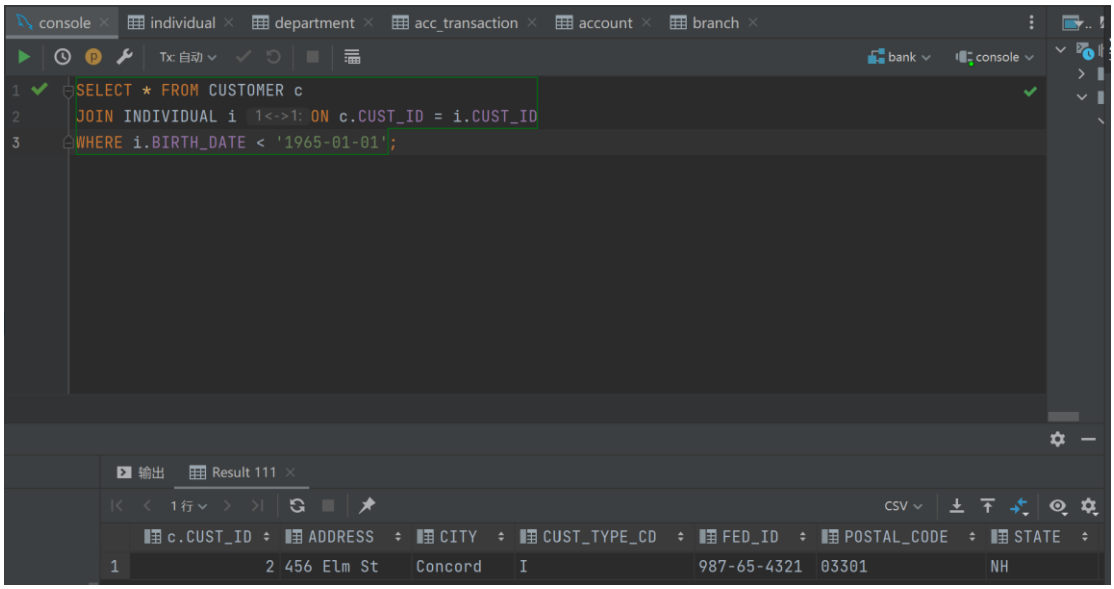

console
employee
department
business
customer
Tx: 自动
1 SELECT DISTINCT CITY FROM CUSTOMER WHERE STATE = 'NH'
2 ORDER BY CITY ASC;
输出
bank.customer
2 行
Tx: 自动
DDL
CITY
1 Concord
2 Portsmouth

p.

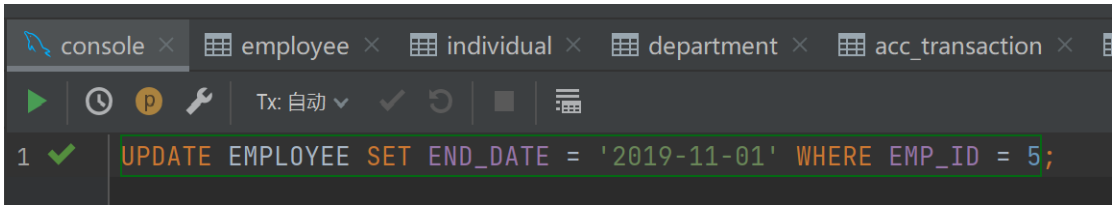

console
individual
department
acc_transaction
account
Tx: 自动
1 UPDATE bank.individual SET LAST_NAME = 'Brown' WHERE CUST_ID = 2;

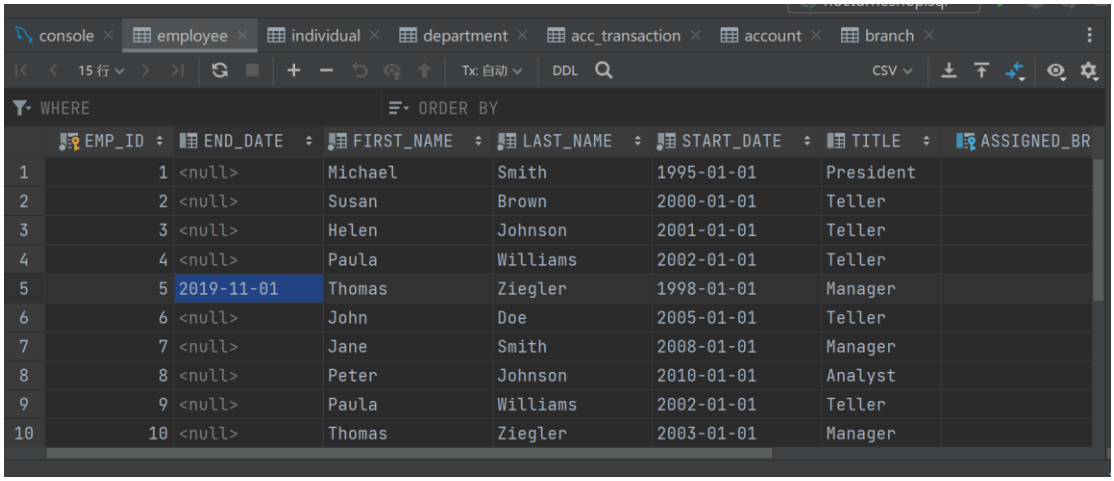

console
individual
department
acc_transaction
account
branch
4 行
Tx: 自动
DDL
WHERE
ORDER BY LAST_NAME
CUST_ID
BIRTH_DATE
FIRST_NAME
LAST_NAME
1 2 1960-01-01 Susan Brown
2 1 1980-01-01 James Hadley
3 4 1990-01-01 David Lee
4 5 1995-01-01 Emily Wang

q.

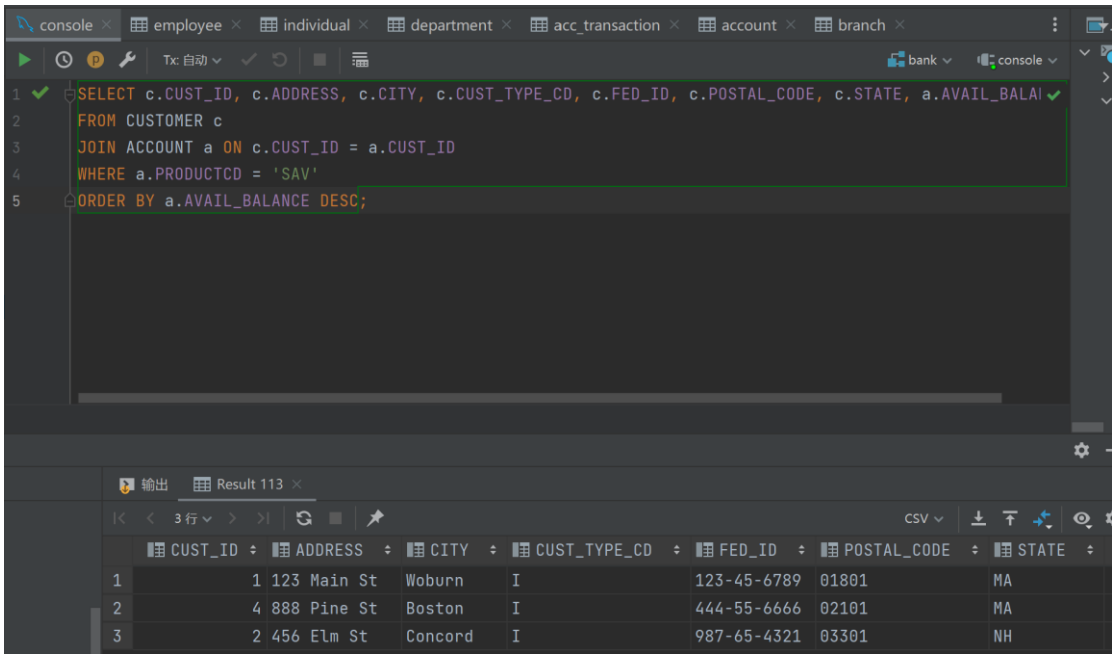

console
individual
department
acc_transaction
account
branch
Tx: 自动
bank
console
SELECT * FROM CUSTOMER c
JOIN INDIVIDUAL i 1<->1: ON c.CUST_ID = i.CUST_ID
WHERE i.BIRTH_DATE < '1965-01-01';
输出
Result 111
1 行
CSV
c.CUST_ID
ADDRESS
CITY
CUST_TYPE_CD
FED_ID
POSTAL_CODE
STATE
1
2
456 Elm St
Concord
I
987-65-4321
03301
NH

r.


console
employee
individual
department
acc_transaction
Tx: 自动
1
UPDATE EMPLOYEE SET END_DATE = '2019-11-01' WHERE EMP_ID = 5;


console
employee
individual
department
acc_transaction
account
branch
15 行
Tx: 自动
DDL
CSV
WHERE
ORDER BY
EMP_ID
END_DATE
FIRST_NAME
LAST_NAME
START_DATE
TITLE
ASSIGNED_BR
1 1 <null> Michael Smith 1995-01-01 President
2 2 <null> Susan Brown 2000-01-01 Teller
3 3 <null> Helen Johnson 2001-01-01 Teller
4 4 <null> Paula Williams 2002-01-01 Teller
5 5 2019-11-01 Thomas Ziegler 1998-01-01 Manager
6 6 <null> John Doe 2005-01-01 Teller
7 7 <null> Jane Smith 2008-01-01 Manager
8 8 <null> Peter Johnson 2010-01-01 Analyst
9 9 <null> Paula Williams 2002-01-01 Teller
10 10 <null> Thomas Ziegler 2003-01-01 Manager

S.


console
employee
individual
department
acc_transaction
account
branch
Tx: 自动
bank
console
SELECT c.CUST_ID, c.ADDRESS, c.CITY, c.CUST_TYPE_CD, c.FED_ID, c.POSTAL_CODE, c.STATE, a.AVAIL_BALA
FROM CUSTOMER c
JOIN ACCOUNT a ON c.CUST_ID = a.CUST_ID
WHERE a.PRODUCTCD = 'SAV'
ORDER BY a.AVAIL_BALANCE DESC;
输出
Result 113
3 行
CSV
CUST_ID ADDRESS CITY CUST_TYPE_CD FED_ID POSTAL_CODE STATE
1 1 123 Main St Woburn I 123-45-6789 01801 MA
2 4 888 Pine St Boston I 444-55-6666 02101 MA
3 2 456 Elm St Concord I 987-65-4321 03301 NH