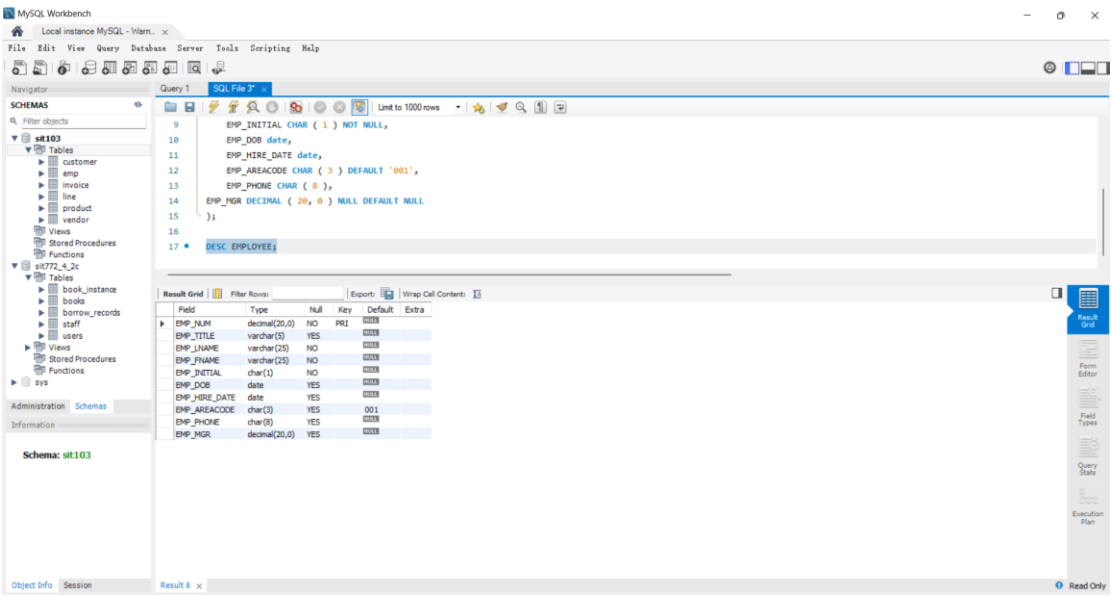
Task

1. Write an SQL statement create the EMPLOYEE table with the following attributes and constraints

(i) your SQL statement to create the EMPLOYEE table, and

```
DROP TABLE
IF
        EXISTS EMPLOYEE;
CREATE TABLE EMPLOYEE (
        EMP_NUM DECIMAL ( 20, 0 ) PRIMARY KEY,
        EMP_TITLE VARCHAR ( 5 ),
        EMP_LNAME VARCHAR ( 25 ) NOT NULL,
        EMP_FNAME VARCHAR ( 25 ) NOT NULL,
        EMP_INITIAL CHAR ( 1 ) NOT NULL,
        EMP_DOB date,
        EMP_HIRE_DATE date,
        EMP_AREACODE CHAR ( 3 ) DEFAULT '001',
        EMP_PHONE CHAR ( 8 ),
EMP_MGR DECIMAL ( 20, 0 ) NULL DEFAULT NULL
);
```

(ii) a screenshot of the result of the following SQL statement

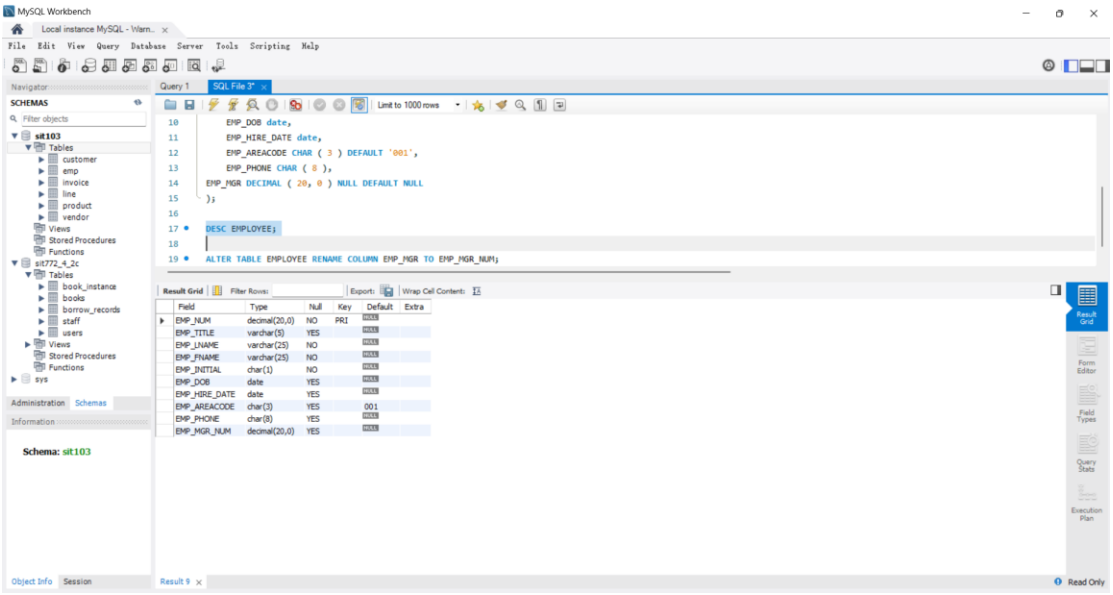


2. Write an SQL statement to change the column name 'EMP_MGR' to 'EMP_MGR_NUM'. [Hint: ALTER TABLE to rename column, discussed in the class].

(i) your SQL statement to alter the EMPLOYEE table, and

```
ALTER TABLE EMPLOYEE RENAME COLUMN EMP_MGR TO EMP_MGR_NUM;
```

(ii) a screenshot of the result of the following SQL statement:

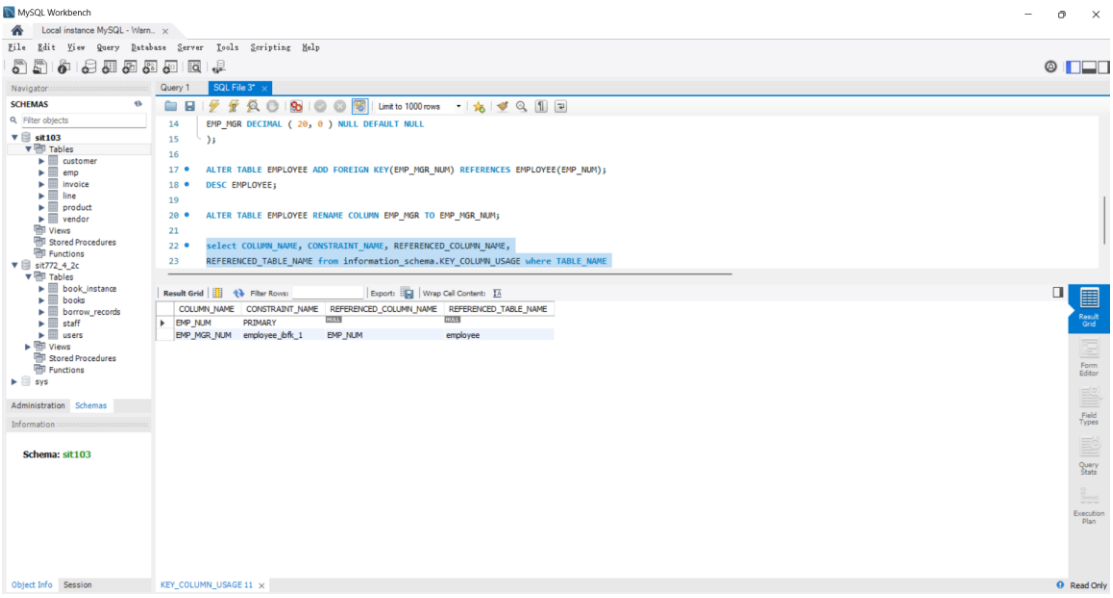


3. Write an SQL statement to ADD FOREIGN KEY CONSTRAINT to EMP_MGR_NUM to reference to EMP_NUM (self-reference). This column indicates who is the manager (EMP_NUM of the manager) of an employee. [Hint: ALTER TABLE to add constraint, discussed in the class]

(i) your SQL statement to add the FOREIGN CONSTRAINT, and

ALTER TABLE EMPLOYEE ADD FOREIGN KEY(EMP_MGR_NUM) REFERENCES EMPLOYEE(EMP_NUM);

(ii) a screenshot of the result of the following SQL statement:

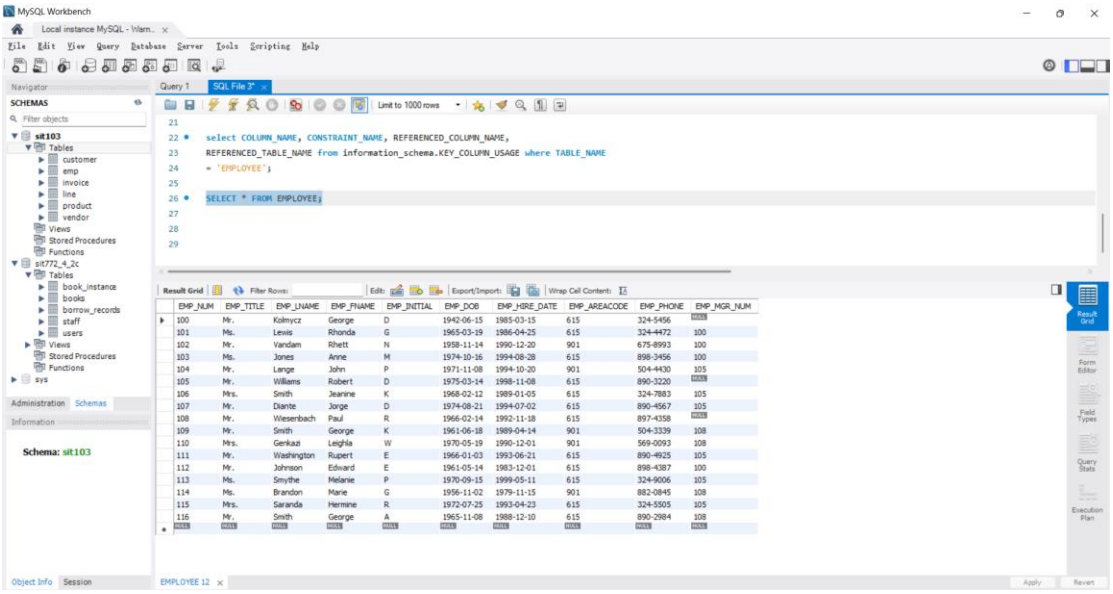


4. Write SQL statements to insert the following records in the EMPLOYEE TABLE.

(i) your SQL statements to insert the above records in the EMPLOYEE table, and

```
INSERT INTO EMPLOYEE VALUES(100,'Mr.' ,'Kolmycz'   ,'George' ,'D' ,'1942-06-15','1985-03-15','615','324-5456',NULL);

INSERT INTO EMPLOYEE VALUES(101,'Ms.' ,'Lewis'     ,'Rhonda' ,'G' ,'1965-03-19','1986-04-25','615','324-4472',100);

INSERT INTO EMPLOYEE VALUES(102,'Mr.' ,'Vandam'    ,'Rhett'  ,'N','1958-11-14','1990-12-20','901','675-8993',100);

INSERT INTO EMPLOYEE VALUES(103,'Ms.' ,'Jones'     ,'Anne'   ,'M' ,'1974-10-16','1994-08-28','615','898-3456',100);

INSERT INTO EMPLOYEE VALUES(105,'Mr.' ,'Williams'  ,'Robert' ,'D' ,'1975-03-14','1998-11-08','615','890-3220',NULL);

INSERT INTO EMPLOYEE VALUES(104,'Mr.' ,'Lange'     ,'John'   ,'P' ,'1971-11-08','1994-10-20','901','504-4430',105);

INSERT INTO EMPLOYEE VALUES(106,'Mrs.','Smith'     ,'Jeanine','K' ,'1968-02-12','1989-01-05','615','324-7883',105);

INSERT INTO EMPLOYEE VALUES(107,'Mr.' ,'Diante'    ,'Jorge'  ,'D' ,'1974-08-21','1994-07-02','615','890-4567',105);

INSERT INTO EMPLOYEE VALUES(108,'Mr.' ,'Wiesenbach','Paul'   ,'R' ,'1966-02-14','1992-11-18','615','897-4358',NULL);

INSERT INTO EMPLOYEE VALUES(109,'Mr.' ,'Smith'     ,'George' ,'K' ,'1961-06-18','1989-04-14','901','504-3339',108);

INSERT INTO EMPLOYEE VALUES(110,'Mrs.','Genkazi'   ,'Leighla','W' ,'1970-05-19','1990-12-01','901','569-0093',108);

INSERT INTO EMPLOYEE VALUES(111,'Mr.' ,'Washington','Rupert' ,'E' ,'1966-01-03','1993-06-21','615','890-4925',105);

INSERT INTO EMPLOYEE VALUES(112,'Mr.' ,'Johnson'   ,'Edward' ,'E' ,'1961-05-14','1983-12-01','615','898-4387',100);

INSERT INTO EMPLOYEE VALUES(113,'Ms.' ,'Smythe'    ,'Melanie','P' ,'1970-09-15','1999-05-11','615','324-9006',105);

INSERT INTO EMPLOYEE VALUES(114,'Ms.' ,'Brandon'   ,'Marie'  ,'G' ,'1956-11-02','1979-11-15','901','882-0845',108);

INSERT INTO EMPLOYEE VALUES(115,'Mrs.','Saranda'   ,'Hermine','R' ,'1972-07-25','1993-04-23','615','324-5505',105);

INSERT INTO EMPLOYEE VALUES(116,'Mr.' ,'Smith'     ,'George' ,'A' ,'1965-11-08','1988-12-10','615','890-2984',108);
```

(ii) a screenshot of the result of the following SQL statement:

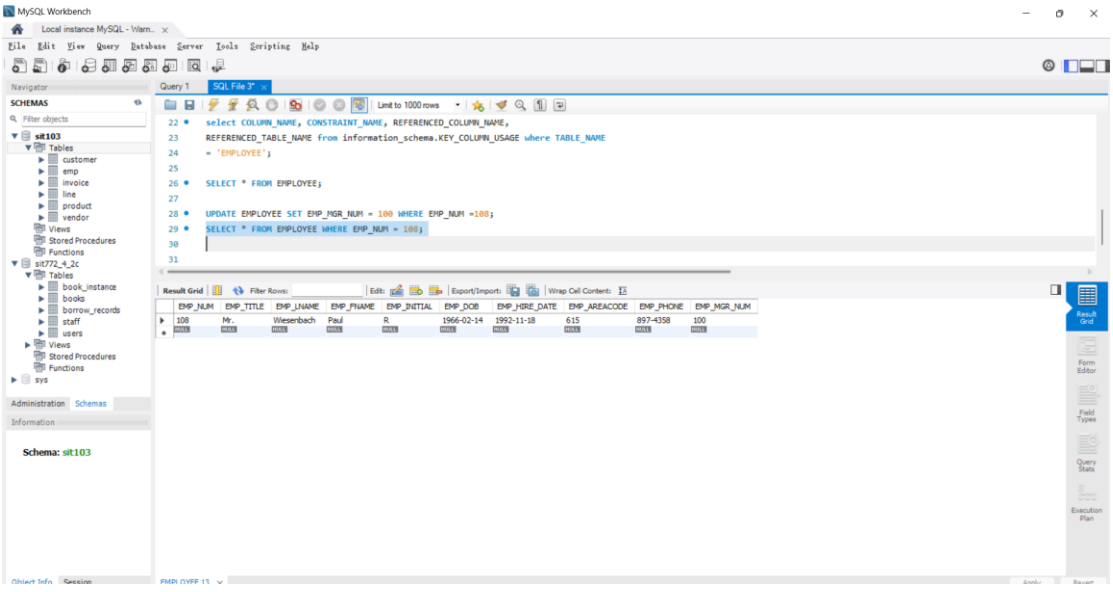


5. Write an SQL statement to set the manager of Paul Wiesenbach (EMP_NUM = 108) as George Kolmycz (EMP_NUM = 100).

(i) your SQL statement to update the manager num, and

UPDATE EMPLOYEE SET EMP_MGR_NUM = 100 WHERE EMP_NUM =108;

(ii) a screenshot of the result of the following SQL statement:



6. Write an SQL statement to delete records of all employees managed by Paul Wiesenbach (EMP_NUM = 108).

(i) your SQL statement to delete records, and

DELETE FROM EMPLOYEE WHERE EMP_MGR_NUM = 108;

(ii) a screenshot of the result of the following SQL statement: