

Data & Information Management

7.1P: DDL and other DML Statements

Task 01

As your answer to this question, please include (i) your SQL statement to create the EMPLOYEE table, and (ii) a screenshot of the result of the following SQL statement DESC EMPLOYEE;

```
CREATE TABLE EMPLOYEE (
    EMP_NUM INT NOT NULL,
    EMP_TITLE VARCHAR(5),
    EMP_LNAME VARCHAR(25),
    EMP_FNAME VARCHAR(25),
    EMP_INITIAL CHAR(1),
    EMP_DOB DATE,
    EMP_HIRE_DATE DATE,
    EMP_AREACODE CHAR(3) DEFAULT '001',
    EMP_PHONE VARCHAR(8),
    EMP_MGR INT,
    PRIMARY KEY (EMP_NUM)
);
```

Your SQL query has been executed successfully.

DESC EMPLOYEE;

[\[Edit inline \]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Extra options

Field	Type	Null	Key	Default	Extra
EMP_NUM	int(11)	NO	PRI	NULL	
EMP_TITLE	varchar(5)	YES		NULL	
EMP_LNAME	varchar(25)	NO		NULL	
EMP_FNAME	varchar(25)	NO		NULL	
EMP_INITIAL	char(1)	NO		NULL	
EMP_DOB	date	YES		NULL	
EMP_HIRE_DATE	date	YES		NULL	
EMP_AREACODE	char(3)	YES		001	
EMP_PHONE	varchar(8)	YES		NULL	
EMP_MGR	int(11)	YES		NULL	

Task 02

As your answer to this question, please include

- (i) your SQL statement to alter the EMPLOYEE table, and
- (ii) a screenshot of the result of the following SQL statement: DESC EMPLOYEE;

```
ALTER TABLE EMPLOYEE
CHANGE COLUMN EMP_MGR EMP_MGR_NUM INT;
```

Your SQL query has been executed successfully.

DESC EMPLOYEE;


[\[Edit inline \]](#) [\[Edit \]](#) [\[Create PHP code \]](#)


Extra options

Field	Type	Null	Key	Default	Extra
EMP_NUM	int(11)	NO	PRI	NULL	
EMP_TITLE	varchar(5)	YES		NULL	
EMP_LNAME	varchar(25)	NO		NULL	
EMP_FNAME	varchar(25)	NO		NULL	
EMP_INITIAL	char(1)	NO		NULL	
EMP_DOB	date	YES		NULL	
EMP_HIRE_DATE	date	YES		NULL	
EMP_AREACODE	char(3)	YES		001	
EMP_PHONE	varchar(8)	YES		NULL	
EMP_MGR_NUM	int(11)	YES		NULL	

Query results operations

 Print

 Copy to clipboard

 Create view

Task 03

As your answer to this question, please include

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

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

select COLUMN_NAME, CONSTRAINT_NAME, REFERENCED_COLUMN_NAME, REFERENCED_TABLE_NAME from information_schema.KEY_COLUMN_USAGE where TABLE_NAME = 'EMPLOYEE';

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

✓ Showing rows 0 - 1 (2 total, Query took 0.0014 seconds.)

`SELECT COLUMN_NAME, CONSTRAINT_NAME, REFERENCED_COLUMN_NAME, REFERENCED_TABLE_NAME FROM information_schema.KEY_COLUMN_USAGE WHERE TABLE_NAME = 'EMPLOYEE';`

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows:

Extra options

COLUMN_NAME	CONSTRAINT_NAME	REFERENCED_COLUMN_NAME	REFERENCED_TABLE_NAME
EMP_NUM	PRIMARY	NULL	NULL
EMP_MGR_NUM	FK_EMPLOYEE_MANAGER	EMP_NUM	employee

☐ Show all | Number of rows: 25 | Filter rows:

Task 04

As your answer to this question, please include

- (i) your SQL statements to insert the above records in the EMPLOYEE table, and
- (ii) a screenshot of the result of the following SQL statement: `SELECT * FROM EMPLOYEE;`

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (100,'Mr.','Kolmycz','George','D', '1942-06-15','1985-03-
15','615','324-5456', NULL);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (101,'Ms.','Lewis','Rhonda','G','1965-03-19','1986-04-
25','615','324-4472', 100);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES(102,'Mr.','Vandam','Rhett','NULL','1958-11-14','1990-12-
20','901','675-8993',100);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (103,'Ms.','Jones','Anne','M','1974-10-16','1994-08-28','615','898-
3456',100);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (104,'Mr.','Lange','John','P','1971-11-08','1994-10-20','901','504-
4430', NULL);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (105,'Mr.','Williams','Robert','D','1957-03-14','1998-11-
08','615','890-3220', NULL);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (106,'Mrs.','Smith','Jeanine','K','1968-02-12','1989-01-
05','615','324-7883', 105);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (107,'Mr.','Deiante','Jorge','D','1974-08-21','1994-07-02','615','890-
4567', 105);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (108, 'Mr.', 'Wiesenbach', 'Paul', 'R', '1966-02-14', '1992-11-
18', '615', '897-4358', NULL);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (109, 'Mr.', 'Smith', 'George', 'K', '1961-06-18', '1989-04-
14', '901', '504-3339', 108);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (110, 'Mrs.', 'Genkazi', 'Leighla', 'W', '1970-05-19', '1990-12-
01', '901', '569-0093', 108);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (111, 'Mr.', 'Washington', 'Rupert', 'E', '1966-01-03', '1993-06-
21', '615', '890-4925', 105);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (112, 'Mr.', 'Johnson', 'Edward', 'E', '1961-05-14', '1983-12-
01', '615', '898-4387', 100);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (113, 'Ms.', 'Smythe', 'Melanie', 'P', '1970-09-15', '1999-05-
11', '615', '324-9006', 105);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (114, 'Ms.', 'Brandon', 'Marie', 'G', '1956-11-02', '1979-11-
15', '901', '882-0845', 108);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (115, 'Mrs.', 'Saranda', 'Hermine', 'R', '1972-07-25', '1993-04-
23', '615', '324-5505', 105);
```

```
INSERT INTO EMPLOYEE (EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME,
EMP_INITIAL, EMP_DOB, EMP_HIRE_DATE, EMP_AREACODE, EMP_PHONE,
EMP_MGR_NUM) VALUES (116, 'Mr.', 'Smith', 'Geogre', 'A', '1965-11-08', '1988-12-
10', '615', '890-2984', 108);
```

☐ Show all | Number of rows: 25 ▼ | Filter rows: | Sort by key: None ▼

Extra options

← T →	EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_DOB	EMP_HIRE_DATE	EMP_AREACODE	EMP_PHONE	EMP_MGR_NUM
<input type="checkbox"/> Edit Copy Delete	100	Mr.	Kolmycz	George	D	1942-06-15	1985-03-15	615	324-5456	NULL
<input type="checkbox"/> Edit Copy Delete	101	Ms.	Lewis	Rhonda	G	1965-03-19	1986-04-25	615	324-4472	100
<input type="checkbox"/> Edit Copy Delete	102	Mr.	Vandam	Rhett	N	1958-11-14	1990-12-20	901	675-8993	100
<input type="checkbox"/> Edit Copy Delete	103	Ms.	Jones	Anne	M	1974-10-16	1994-08-28	615	898-3456	100
<input type="checkbox"/> Edit Copy Delete	104	Mr.	Lange	John	P	1971-11-08	1994-10-20	901	504-4430	NULL
<input type="checkbox"/> Edit Copy Delete	105	Mr.	Williams	Robert	D	1957-03-14	1998-11-08	615	890-3220	NULL
<input type="checkbox"/> Edit Copy Delete	106	Mrs.	Smith	Jeanine	K	1968-02-12	1989-01-05	615	324-7883	105
<input type="checkbox"/> Edit Copy Delete	107	Mr.	Deiante	Jorge	D	1974-08-21	1994-07-02	615	890-4567	105
<input type="checkbox"/> Edit Copy Delete	108	Mr.	Wiesenbach	Paul	R	1966-02-14	1992-11-18	615	897-4358	NULL
<input type="checkbox"/> Edit Copy Delete	109	Mr.	Smith	George	K	1961-06-18	1989-04-14	901	504-3339	108
<input type="checkbox"/> Edit Copy Delete	110	Mrs.	Genkazi	Leighla	W	1970-05-19	1990-12-01	901	569-0093	108
<input type="checkbox"/> Edit Copy Delete	111	Mr.	Washington	Rupert	E	1966-01-03	1993-06-21	615	890-4925	105
<input type="checkbox"/> Edit Copy Delete	112	Mr.	Johnson	Edward	E	1961-05-14	1983-12-01	615	898-4387	100
<input type="checkbox"/> Edit Copy Delete	113	Ms.	Smythe	Melanie	P	1970-09-15	1999-05-11	615	324-9006	105
<input type="checkbox"/> Edit Copy Delete	114	Ms.	Brandon	Marie	G	1956-11-02	1979-11-15	901	882-0845	108
<input type="checkbox"/> Edit Copy Delete	115	Mrs.	Saranda	Hermine	R	1972-07-25	1993-04-23	615	324-5505	105
<input type="checkbox"/> Edit Copy Delete	116	Mr.	Smith	Geogre	A	1965-11-08	1988-12-10	615	890-2984	108

Task 05

Write an SQL statement to set the manager of Paul Wiesenbach (EMP_NUM = 108) as George Kolmycz (EMP_NUM = 100). As your answer to this question, please include

- (i) your SQL statement to update the manager num, and
- (ii) a screenshot of the result of the following SQL statement:

✓ 1 row affected. (Query took 0.0050 seconds.)

```
UPDATE employee SET EMP_MGR_NUM=100 WHERE EMP_NUM=108;
```

[Edit inline] [Edit] [Create PHP code]

✓ Showing rows 0 - 0 (1 total, Query took 0.0004 seconds.)

```
SELECT * FROM employee WHERE EMP_NUM = 108;
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

	EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_DOB	EMP_HIRE_DATE	EMP_AREACODE	EMP_PHONE	EMP_MGR_NUM
<input type="checkbox"/> Edit Copy Delete	108	Mr.	Wiesenbach	Paul	R	1966-02-14	1992-11-18	615	897-4358	100

↑ ☐ Check all With selected: Edit Copy Delete Export

Task 06

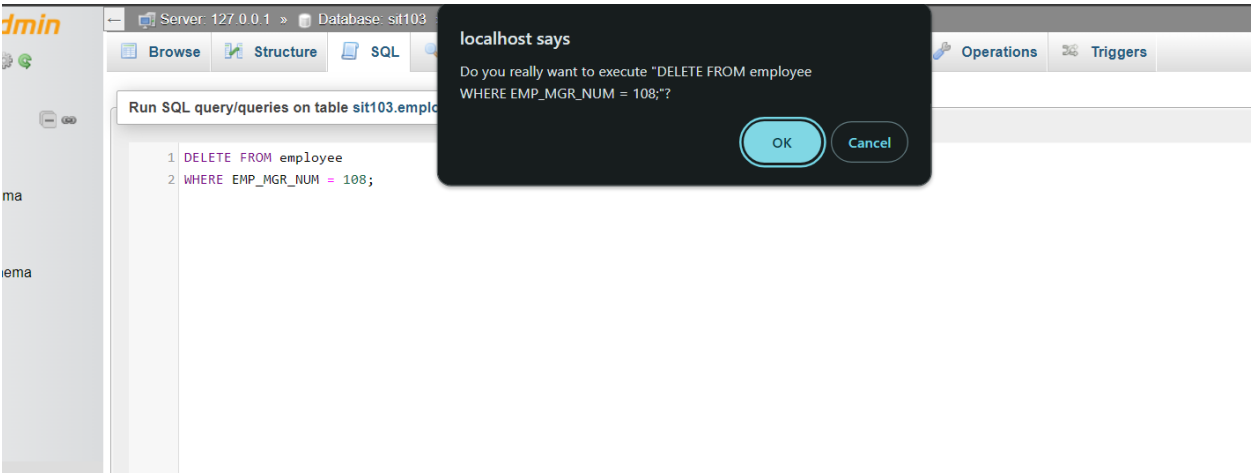
Write an SQL statement to delete records of all employees managed by Paul Wiesenbach (EMP_NUM = 108). As your answer to this question, please include

- (i) your SQL statement to delete records, and
- (ii) a screenshot of the result of the following SQL statement:

✓ 4 rows deleted. (Query took 0.0023 seconds.)

```
DELETE FROM employee WHERE EMP_MGR_NUM = 108;
```

[Edit inline] [Edit] [Create PHP code]



The screenshot shows the phpMyAdmin interface. A confirmation dialog box is displayed in the center, asking 'Do you really want to execute "DELETE FROM employee WHERE EMP_MGR_NUM = 108;?". The dialog has 'OK' and 'Cancel' buttons. In the background, the SQL query editor is visible, showing the same DELETE statement. The top navigation bar includes 'Browse', 'Structure', and 'SQL' tabs. The left sidebar shows the database structure, and the right sidebar has 'Operations' and 'Triggers' tabs.

SELECT * FROM `employee`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_DOB	EMP_HIRE_DATE	EMP_AREACODE	EMP_PHONE	EMP_MGR_NUM
<input type="checkbox"/> Edit Copy Delete	100	Mr.	Kolmycz	George	D	1942-06-15	1985-03-15	615	324-5456	NULL
<input type="checkbox"/> Edit Copy Delete	101	Ms.	Lewis	Rhonda	G	1965-03-19	1986-04-25	615	324-4472	100
<input type="checkbox"/> Edit Copy Delete	102	Mr.	Vandam	Rhett	N	1958-11-14	1990-12-20	901	675-8993	100
<input type="checkbox"/> Edit Copy Delete	103	Ms.	Jones	Anne	M	1974-10-16	1994-08-28	615	898-3456	100
<input type="checkbox"/> Edit Copy Delete	104	Mr.	Lange	John	P	1971-11-08	1994-10-20	901	504-4430	NULL
<input type="checkbox"/> Edit Copy Delete	105	Mr.	Williams	Robert	D	1957-03-14	1998-11-08	615	890-3220	NULL
<input type="checkbox"/> Edit Copy Delete	106	Mrs.	Smith	Jeanine	K	1968-02-12	1989-01-05	615	324-7883	105
<input type="checkbox"/> Edit Copy Delete	107	Mr.	Deiante	Jorge	D	1974-08-21	1994-07-02	615	890-4567	105
<input type="checkbox"/> Edit Copy Delete	108	Mr.	Wiesenbach	Paul	R	1966-02-14	1992-11-18	615	897-4358	100
<input type="checkbox"/> Edit Copy Delete	111	Mr.	Washington	Rupert	E	1966-01-03	1993-06-21	615	890-4925	105
<input type="checkbox"/> Edit Copy Delete	112	Mr.	Johnson	Edward	E	1961-05-14	1983-12-01	615	898-4387	100
<input type="checkbox"/> Edit Copy Delete	113	Ms.	Smythe	Melanie	P	1970-09-15	1999-05-11	615	324-9006	105
<input type="checkbox"/> Edit Copy Delete	115	Mrs.	Saranda	Hermine	R	1972-07-25	1993-04-23	615	324-5505	105

↑ ☐ Check all | With selected: Edit Copy Delete Export