Data & Information Management

Assignment 7.1P

1. Write an SQL statement create the EMPLOYEE table

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)

```
CREATE TABLE EMPLOYEE ( EMP_NUM INT 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 VARCHAR(3) DEFAULT '001', EMP_PHONE VARCHAR(8), EMP_MGR INT );
```

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

Your SQL query has been executed successfully.

```
DESC employee;
```

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

Extra options

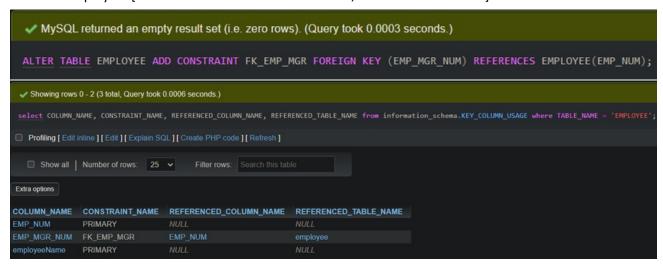| Field	Type	Null	Key	Default	Extra
EMP_NUM	int(11)	NO	PRI	NULL	
EMP_TITLE	varchar(5)	YES		NULL	
EMP_LNAME	varchar(25)	NO		NULL	
EMP_FNAME	varchar(25)	NO		NULL	
EMP_INITIAL	char(1)	NO		NULL	
EMP_DOB	date	YES		NULL	
EMP_HIRE_DATE	date	YES		NULL	
EMP_AREACODE	varchar(3)	YES		001	
EMP_PHONE	varchar(8)	YES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

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].

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)

```
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	varchar(3)	YES		001	
EMP_PHONE	varchar(8)	YES		NULL	
EMP_MGR_NUM	int(11)	YES		NULL	

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]
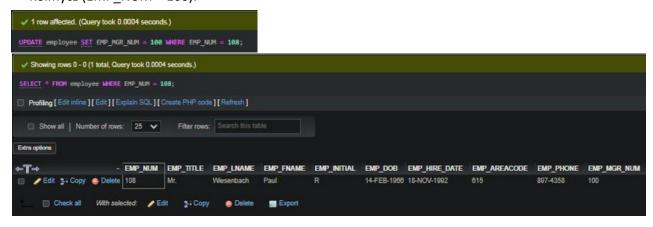
✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)

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

✔ Showing rows 0 - 2 (3 total, Query took 0.0006 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: Search this table

Extra options

COLUMN_NAME	CONSTRAINT_NAME	REFERENCED_COLUMN_NAME	REFERENCED_TABLE_NAME
EMP_NUM	PRIMARY	NULL	NULL
EMP_MGR_NUM	FK_EMP_MGR	EMP_NUM	employee
employeeName	PRIMARY	NULL	NULL

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','15-JUN-1942','15-MAR-1985','615','324-5456',NULL);

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','19-MAR-1965','25-APR-1986','615','324-4472','100');

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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,'14-NOV-1958','20-DEC-1990','901','675-8993','100');

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','16-OCT-1974','28-AUG-1994','615','898-3456','100');

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','08-NOV-1971','20-OCT-1994','901','504-4430','105');

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','14-MAR-1975','08-NOV-1998','615','890-3220',NULL);

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','12-FEB-1968','05-JAN-1989','615','324-7883','105');

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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.','Diante','Jorge','D','21-AUG-1974','02-JUL-1994','615','890-4567','105');

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','14-FEB-1966','18-NOV-1992','615','897-4358',NULL);

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

✔ 1 row inserted. (Query took 0.0003 seconds.)

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','18-JUN-1961','14-APR-1989','901','504-3339','100');

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

✔ 1 row inserted. (Query took 0.0002 seconds.)

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','19-MAY-1970','01-DEC-1990','901','569-0093','108');

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

```
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','03-JAN-1966','21-JUN-1993','615','890-4925','105');
```

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

```
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','14-MAY-1961','01-DEC-1983','615','898-4387','100');
```

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

```
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','15-SEP-1970','11-MAY-1999','615','324-9006','105');
```

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

```
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','02-NOV-1956','15-NOV-1979','901','882-0845','108');
```

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

```
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','25-JUL-1972','23-APR-1993','615','324-5505','105');
```

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

```
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','George','A','08-NOV-1965','10-DEC-1988','615','890-2984','108');
```

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

```
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
☐ 🖉 Edit ⧉ Copy ⊘ Delete	100	Mr.	Kolmycz	George	D	15-JUN-1942	15-MAR-1985	615	324-5456	NULL
☐ 🖉 Edit ⧉ Copy ⊘ Delete	101	Ms.	Lewis	Rhonda	G	19-MAR-1965	25-APR-1986	615	324-4472	100
☐ 🖉 Edit ⧉ Copy ⊘ Delete	102	Mr.	Vandam	Rhett	NULL	14-NOV-1958	20-DEC-1990	901	675-8993	100
☐ 🖉 Edit ⧉ Copy ⊘ Delete	103	Ms.	Jones	Anne	M	16-OCT-1974	28-AUG-1994	615	898-3456	100
☐ 🖉 Edit ⧉ Copy ⊘ Delete	104	Mr.	Lange	John	P	08-NOV-1971	20-OCT-1994	901	504-4430	105
☐ 🖉 Edit ⧉ Copy ⊘ Delete	105	Mr.	Williams	Robert	D	14-MAR-1975	08-NOV-1998	615	890-3220	NULL
☐ 🖉 Edit ⧉ Copy ⊘ Delete	106	Mrs.	Smith	Jeanine	K	12-FEB-1968	05-JAN-1989	615	324-7883	105
☐ 🖉 Edit ⧉ Copy ⊘ Delete	107	Mr.	Diante	Jorge	D	21-AUG-1974	02-JUL-1994	615	890-4567	105
☐ 🖉 Edit ⧉ Copy ⊘ Delete	108	Mr.	Wiesenbach	Paul	R	14-FEB-1966	18-NOV-1992	615	897-4358	NULL
☐ 🖉 Edit ⧉ Copy ⊘ Delete	109	Mr.	Smith	George	K	18-JUN-1961	14-APR-1989	901	504-3339	108
☐ 🖉 Edit ⧉ Copy ⊘ Delete	110	Mrs.	Genkazi	Leighla	W	19-MAY-1970	01-DEC-1990	901	569-0093	108
☐ 🖉 Edit ⧉ Copy ⊘ Delete	111	Mr.	Washington	Rupert	E	03-JAN-1966	21-JUN-1993	615	890-4925	105
☐ 🖉 Edit ⧉ Copy ⊘ Delete	112	Mr.	Johnson	Edward	E	14-MAY-1961	01-DEC-1983	615	898-4387	100
☐ 🖉 Edit ⧉ Copy ⊘ Delete	113	Ms.	Smythe	Melanie	P	15-SEP-1970	11-MAY-1999	615	324-9006	105
☐ 🖉 Edit ⧉ Copy ⊘ Delete	114	Ms.	Brandon	Marie	G	02-NOV-1956	15-NOV-1979	901	882-0845	108
☐ 🖉 Edit ⧉ Copy ⊘ Delete	115	Mrs.	Saranda	Hermine	R	25-JUL-1972	23-APR-1993	615	324-5505	105
☐ 🖉 Edit ⧉ Copy ⊘ Delete	116	Mr.	Smith	George	A	08-NOV-1965	10-DEC-1988	615	890-2984	108

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

✔ 1 row affected. (Query took 0.0004 seconds.)

UPDATE employee SET EMP_MGR_NUM = 100 WHERE EMP_NUM = 108;

✔ 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

←T→				EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_DOB	EMP_HIRE_DATE	EMP_AREACODE	EMP_PHONE	EMP_MGR_NUM
☐	✎ Edit	⚬ Copy	⬤ Delete	108	Mr.	Wiesenbach	Paul	R	14-FEB-1966	18-NOV-1992	815	897-4358	100

☐ Check all   With selected: ✎ Edit   ⚬ Copy   ⬤ Delete   ⬛ Export

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

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

DELETE FROM employee WHERE EMP_MGR_NUM = 108;

✔ Showing rows 0 - 12 (13 total, Query took 0.0003 seconds.)

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

←T→				EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_DOB	EMP_HIRE_DATE	EMP_AREACODE	EMP_PHONE	EMP_MGR_NUM
☐	✎ Edit	⚬ Copy	⬤ Delete	100	Mr.	Kolmycz	George	D	15-JUN-1942	15-MAR-1985	615	324-5456	NULL
☐	✎ Edit	⚬ Copy	⬤ Delete	101	Ms.	Lewis	Rhonda	G	19-MAR-1965	25-APR-1986	615	324-4472	100
☐	✎ Edit	⚬ Copy	⬤ Delete	102	Mr.	Vandam	Rhett	NULL	14-NOV-1958	20-DEC-1990	901	675-8993	100
☐	✎ Edit	⚬ Copy	⬤ Delete	103	Ms.	Jones	Anne	M	16-OCT-1974	28-AUG-1994	615	898-3456	100
☐	✎ Edit	⚬ Copy	⬤ Delete	104	Mr.	Lange	John	P	08-NOV-1971	20-OCT-1994	901	504-4430	105
☐	✎ Edit	⚬ Copy	⬤ Delete	105	Mr.	Williams	Robert	D	14-MAR-1975	08-NOV-1998	615	890-3220	NULL
☐	✎ Edit	⚬ Copy	⬤ Delete	106	Mrs.	Smith	Jeanine	K	12-FEB-1968	05-JAN-1989	615	324-7883	105
☐	✎ Edit	⚬ Copy	⬤ Delete	107	Mr.	Diante	Jorge	D	21-AUG-1974	02-JUL-1994	615	890-4567	105
☐	✎ Edit	⚬ Copy	⬤ Delete	108	Mr.	Wiesenbach	Paul	R	14-FEB-1966	18-NOV-1992	615	897-4358	100
☐	✎ Edit	⚬ Copy	⬤ Delete	111	Mr.	Washington	Rupert	E	03-JAN-1966	21-JUN-1993	615	890-4925	105
☐	✎ Edit	⚬ Copy	⬤ Delete	112	Mr.	Johnson	Edward	E	14-MAY-1961	01-DEC-1983	615	898-4387	100
☐	✎ Edit	⚬ Copy	⬤ Delete	113	Ms.	Smythe	Melanie	P	15-SEP-1970	11-MAY-1999	615	324-9006	105
☐	✎ Edit	⚬ Copy	⬤ Delete	115	Mrs.	Saranda	Hermine	R	25-JUL-1972	23-APR-1993	615	324-5505	105

☐ Check all   With selected: ✎ Edit   ⚬ Copy   ⬤ Delete   ⬛ Export