

1번

```
4 • DROP TABLE IF EXISTS countries;
5 • CREATE TABLE if not exists countries (
6   COUNTRY_ID integer NOT NULL AUTO_INCREMENT PRIMARY KEY,
7   COUNTRY_NAME varchar(40) NOT NULL default 'N/A',
8   REGION_ID integer NOT NULL
9 );
10 • ALTER TABLE countries RENAME country_new;
11
12 • truncate countries;
```

Field	Type	Null	Key	Default	Extra
COUNTRY_ID	int	NO	PRI	NULL	auto_increment
COUNTRY_NAME	varchar(40)	NO		N/A	
REGION_ID	int	NO		NULL	

2번

```
alter table locations
add region_id int;
```

region id	int	YES	NULL
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3번

```
ALTER TABLE locations
ADD ID INT FIRST;
```

ID	int	YES	NULL
----	-----	-----	------

4번

```
ALTER TABLE locations
ADD region_id INT
AFTER state_province;
```

STATE_PROVINCE	varchar(25)	YES	MUL	NULL
region_id	int	YES		NULL

5번

```
ALTER TABLE locations
MODIFY country_id INT;
```

country_id	int	YES	MUL	NULL
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6번

```
18 • ALTER TABLE locations
19 DROP city;
20
21 • desc locations;
```

Field	Type	Null	Key	Default	Extra
LOCATION_ID	decimal(4,0)	NO	PRI	0	
STREET_ADDRESS	varchar(40)	YES		NULL	
POSTAL_CODE	varchar(12)	YES		NULL	
STATE_PROVINCE	varchar(25)	YES	MUL	NULL	
region_id	int	YES		NULL	
country_id	int	YES	MUL	NULL	

7번

```
ALTER TABLE locations
CHANGE state_province state varchar(25);
```

state	varchar(25)	YES	MUL	NULL
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8번

```
ALTER TABLE locations
ADD PRIMARY KEY(location_id);
```

LOCATION_ID	decimal(4,0)	NO	PRI	0
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9번

```
ALTER TABLE locations
ADD PRIMARY KEY(location_id,country_id);
```

LOCATION_ID	decimal(4,0)	NO	PRI	0
COUNTRY_ID	varchar(2)	NO	PRI	NULL

10번

```
17 • ALTER TABLE locations DROP PRIMARY KEY;
18
19 • desc locations;
```

Field	Type	Null	Key	Default	Extra
LOCATION_ID	decimal(4,0)	NO		0	
STREET_ADDRESS	varchar(40)			decimal(4,0)	NULL
POSTAL_CODE	varchar(12)	YES		NULL	
CITY	varchar(30)	NO	MUL	NULL	
STATE_PROVINCE	varchar(25)	YES	MUL	NULL	
COUNTRY_ID	varchar(2)	NO		NULL	

11번

```
ALTER TABLE job_history
ADD FOREIGN KEY(job_id)
REFERENCES jobs(job_id);
```

job_history	1	JOB_ID	1	JOB_ID	A	0	NULL	NULL	BTREE
-------------	---	--------	---	--------	---	---	------	------	-------

12번

```
ALTER TABLE job_history
ADD CONSTRAINT fk_job_id
FOREIGN KEY (job_id)
REFERENCES jobs(job_id)
ON UPDATE RESTRICT
ON DELETE CASCADE;
```

job_history	1	fk_job_id	1	JOB_ID	A	0	NULL	NULL	BTREE
-------------	---	-----------	---	--------	---	---	------	------	-------

13번

```
ALTER TABLE job_history
DROP FOREIGN KEY fk_job_id;
```

job_history	1	fk_job_id	1	JOB_ID	A	0	NULL	NULL	BTREE
-------------	---	-----------	---	--------	---	---	------	------	-------

Here in the above the foreign key index file is appearing although the foreign key have been dropped, but the action of foreign key constraint have lost.

14번

```
ALTER TABLE job_history
ADD INDEX indx_job_id(job_id);
```

job_history	0	PRIMARY	1	EMPLOYEE_ID	A	0	NULL	NULL	BTREE
job_history	1	indx_job_id	1	JOB_ID	A	0	NULL	NULL	BTREE

15번

```
ALTER TABLE job_history
DROP INDEX indx_job_id;
```

job_history	0	PRIMARY	1	EMPLOYEE_ID	A	0	NULL	NULL	BTREE
-------------	---	---------	---	-------------	---	---	------	------	-------

1번

```
205      /* WRITE YOUR QUERY HERE */
206
207 •   SELECT first_name "First Name", last_name "Last Name" FROM employees;
208
209
210
211
212
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

First Name	Last Name
Ellen	Abel
Sundar	Ande
Mozhe	Atkinson
David	Austin
Hermann	Baer
Shelli	Baida
Amit	Banda
Elizabeth	Bates
Sarah	Bell
David	Bernstein
Laura	Riesot

2번

```
204 •   SELECT DISTINCT department_id FROM employees;
205
```

Result Grid | Filter Rows: | Export: | Wrap

department_id
0
10
20
30
40
50
60
70
80
90
100

3번

```
204 •   SELECT *
205       FROM employees
206       ORDER BY first_name DESC;
207
```

Result Grid | Filter Rows:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	E
180	Winston	Taylor	W
171	William	Smith	W
206	William	Gietz	W
195	Vance	Jones	VJ
106	Valli	Pataballa	VF
141	Trenna	Rajs	TR
132	TJ	Olson	TJ
190	Timothy	Gates	TC

4번

```
204 • SELECT first_name, last_name, salary, salary*.15 PF
205 FROM employees;
```

Result Grid				
Filter Rows: <input type="text"/>				
Export: Wrap Cell Co				
	first_name	last_name	salary	PF
▶	Steven	King	24000.00	3600.0000
	Neena	Kochhar	17000.00	2550.0000
	Lex	De Haan	17000.00	2550.0000
	Alexander	Hunold	9000.00	1350.0000
	Bruce	Ernst	6000.00	900.0000
	David	Austin	4800.00	720.0000
	Valli	Pataballa	4800.00	720.0000
	Diana	Lorentz	4200.00	630.0000
	Nancy	Greenberg	12000.00	1800.0000
	Daniel	Faviet	9000.00	1350.0000

5번

```
204 • SELECT employee_id, first_name, last_name, salary
205 FROM employees
206 ORDER BY salary;
```

Result Grid				
Filter Rows: <input type="text"/>				
Export: Wrap Cell C				
	employee_id	first_name	last_name	salary
▶	132	TJ	Olson	2100.00
	128	Steven	Markle	2200.00
	136	Hazel	Philtanker	2200.00
	127	James	Landry	2400.00
	135	Ki	Gee	2400.00
	119	Karen	Colmenares	2500.00
	131	James	Marlow	2500.00
	140	Joshua	Patel	2500.00
	144	Peter	Vargas	2500.00
	182	Martha	Sullivan	2500.00

6번

```
204 • SELECT SUM(salary)
205 FROM employees;
```

Result Grid	
Filter Rows: <input type="text"/>	
SUM(salary)	
▶	691400.00

7번

```
204 • SELECT MAX(salary), MIN(salary)
205      FROM employees;
```

Result Grid | Filter Rows:

	MAX(salary)	MIN(salary)
▶	24000.00	2100.00

8번

```
204 • SELECT AVG(salary), COUNT(*)
205      FROM employees;
```

Result Grid | Filter Rows:

	AVG(salary)	COUNT(*)
▶	6461.682243	107

9번

```
204 • SELECT COUNT(*)
205      FROM employees;
```

Result Grid | Filter Rows:

	COUNT(*)
▶	107

10번

```
204 • SELECT COUNT(DISTINCT job_id)
205      FROM employees;
```

Result Grid | Filter Rows:

	COUNT(DISTINCT job_id)
▶	19

11번

```
204 • SELECT UPPER(first_name)
205      FROM employees;
```

Result Grid | Filter Rows:

	UPPER(first_name)
▶	ELLEN
	SUNDAR
	MOZHE
	DAVID
	HERMANN

12번

```
204 • SELECT SUBSTRING(first_name,1,3)
205 FROM employees;
```

Result Grid	Filter Rows:
SUBSTRING(first_name,1,3)	
El	
Sun	
Moz	
Dav	
Her	
She	
Ami	
Eli	
Sar	
Dav	

13번

```
204 • SELECT 171*214+625 Result;
```

Result Grid	Filter Rows:
Result	
37219	

14번

```
204 • SELECT CONCAT(first_name,' ', last_name) 'Employee Name'
205 FROM employees;
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Employee Name			
Ellen Abel			
Sundar Ande			
Mozhe Atkinson			
David Austin			
Hermann Baer			

15번

```
204 • SELECT TRIM(first_name)
205 FROM employees;
```

Result Grid	Filter Rows:
TRIM(first_name)	
Ellen	
Sundar	
Mozhe	
David	
Hermann	

16번

```
204 • SELECT first_name,last_name, LENGTH(first_name)+LENGTH(last_name) 'Length of Names'
205 FROM employees;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	first_name	last_name	Length of Names
▶	Ellen	Abel	9
	Sundar	Ande	10
	Mozhe	Atkinson	13
	David	Austin	11

17번

```
204 • SELECT *
205 FROM employees
206 WHERE first_name REGEXP '[0-9]';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COM
▶	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

18번

```
204 • SELECT employee_id, first_name
205 FROM employees LIMIT 10;
```

Result Grid | Filter Rows: |

	employee_id	first_name
▶	100	Steven
	101	Neena
	102	Lex
	103	Alexander
	104	Bruce
	105	David
	106	Valli
	107	Diana

19번

	first_name	last_name	Monthly Salary
▶	Steven	King	2000.00
	Neena	Kochhar	1416.67
	Lex	De Haan	1416.67
	Alexander	Hunold	750.00
	Bruce	Ernst	500.00
	David	Austin	400.00
	Valli	Pataballa	400.00
	Diana	Lorentz	350.00
	Nancy	Greenberg	1000.00
	Daniel	Faviet	750.00