

Assignment 1

1. Write a SQL statement to create a simple table of countries including columns country_id, country_name and region_id.

```
mysql> create database world;
Query OK, 1 row affected (0.00 sec)

mysql> use world;
Database changed
mysql> create table countries ( country_id varchar(5), country_name varchar(50), region_id decimal(20,0));
Query OK, 0 rows affected (0.02 sec)

mysql> desc countries;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| country_id | varchar(5)    | YES  |     | NULL    |       |
| country_name | varchar(50)   | YES  |     | NULL    |       |
| region_id  | decimal(20,0) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

2. Write a SQL statement to create a simple table of countries including columns country_id, country_name and region_id which already exists.

```
mysql> create table countries ( country_id varchar(5), country_name varchar(50), region_id decimal(20,0));
ERROR 1050 (42S01): Table 'countries' already exists
mysql>
```

3. Write a SQL statement to create the structure of a table dup_countries similar to countries.

```
mysql> create table if not exists dup_countries like countries;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc dup_countries;
```

Field	Type	Null	Key	Default	Extra
country_id	varchar(5)	YES		NULL	
country_name	varchar(50)	YES		NULL	
region_id	decimal(20,0)	YES		NULL	

3 rows in set (0.00 sec)

4. Write a SQL statement to create a duplicate copy of countries table including structure and data by name dup_countries.

```
mysql> create table if not exists dup_countries as select * from countries;
Query OK, 0 rows affected, 1 warning (0.00 sec)
```

```
mysql> desc dup_countries;
```

Field	Type	Null	Key	Default	Extra
country_id	varchar(5)	YES		NULL	
country_name	varchar(50)	YES		NULL	
region_id	decimal(20,0)	YES		NULL	

3 rows in set (0.00 sec)

5. Write a SQL statement to create a table where countries set a constraint NULL.

```
mysql> create table if not exists countries (country_id varchar(5) not null, country_name varchar(50) not null, region_id decimal(20,0) not null);
```

Query OK, 0 rows affected, 1 warning (0.00 sec)

```
mysql> desc countries;
```

Field	Type	Null	Key	Default	Extra
country_id	varchar(5)	YES		NULL	
country_name	varchar(50)	YES		NULL	
region_id	decimal(20,0)	YES		NULL	

3 rows in set (0.00 sec)

6. Write a SQL statement to create a table named jobs including columns job_id, job_title, min_salary, max_salary and check whether the max_salary amount exceeds the upper limit 25000.

```
mysql> create database naukri;
```

Query OK, 1 row affected (0.00 sec)

```
mysql> use naukri;
```

Database changed

```
mysql> create table if not exists jobs ( job_id varchar(20) not null, job_title varchar(40) not null, min_salary decimal(10,0), max_salary decimal(10,0) check(max_salary<=25000));
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> desc jobs;
```

Field	Type	Null	Key	Default	Extra
job_id	varchar(20)	NO		NULL	
job_title	varchar(40)	NO		NULL	
min_salary	decimal(10,0)	YES		NULL	
max_salary	decimal(10,0)	YES		NULL	

4 rows in set (0.00 sec)

7. Write a SQL statement to create a table named countries including columns country_id, country_name and region_id and make sure that no countries except Italy, India and China will be entered in the table.

```
mysql> use world;
Database changed
mysql> create table if not exists countries (country_id varchar(5), country_name varchar(50) check(country_name in('italy','india','china')), region_id decimal(20,0) );
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> desc countries;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| country_id     | varchar(5)    | YES  |     | NULL    |       |
| country_name   | varchar(50)   | YES  |     | NULL    |       |
| region_id      | decimal(20,0) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

8. Write a SQL statement to create a table named job_history including columns employee_id, start_date, end_date, job_id and department_id and make sure that the value against column end_date will be entered at the time of insertion to the format like '--/--/----'.

```
mysql> create table if not exists job_history ( employee_id decimal(10,0) not null, start_date date not null, end_date date not null check (end_date like '--/--/----'), job_id varchar(20) not null, department_id decimal(10,0) not null );
Query OK, 0 rows affected (0.01 sec)

mysql> desc job_history;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| employee_id    | decimal(10,0) | NO   |     | NULL    |       |
| start_date     | date          | NO   |     | NULL    |       |
| end_date       | date          | NO   |     | NULL    |       |
| job_id         | varchar(20)   | NO   |     | NULL    |       |
| department_id  | decimal(10,0) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

9. Write a SQL statement to create a table named countries including columns country_id, country_name and region_id and make sure that no duplicate data against column country_id will be allowed at the time of insertion.

```
mysql> create table if not exists countries ( country_id varchar(5), country_name varchar(50), region_id decimal(20,0), unique(country_id));
Query OK, 0 rows affected, 1 warning (0.00 sec)
```

```
mysql> desc countries;
```

Field	Type	Null	Key	Default	Extra
country_id	varchar(5)	YES		NULL	
country_name	varchar(50)	YES		NULL	
region_id	decimal(20,0)	YES		NULL	

3 rows in set (0.00 sec)

10. Write a SQL statement to create a table named jobs including columns job_id, job_title, min_salary and max_salary, and make sure that, the default value for job_title is blank and min_salary is 8000 and max_salary is NULL will be entered automatically at the time of insertion if no value assigned for the specified columns.

```
mysql> create table if not exists jobs ( job_id varchar(20) not null unique, job_title varchar(40) not null default ' ', min_salary decimal(10,0) default 8000, max_salary decimal(10,0) default null);
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc jobs;
```

Field	Type	Null	Key	Default	Extra
job_id	varchar(20)	NO	PRI	NULL	
job_title	varchar(40)	NO			
min_salary	decimal(10,0)	YES		8000	
max_salary	decimal(10,0)	YES		NULL	

4 rows in set (0.01 sec)

ALTER COMMAND

1. Write a SQL statement to rename the table countries to country_new.

```
mysql> show tables;
+-----+
| Tables_in_world |
+-----+
| countries        |
| dup_countries    |
| job_history       |
| jobs             |
+-----+
4 rows in set (0.00 sec)

mysql> alter table countries rename country_new;
Query OK, 0 rows affected (0.02 sec)

mysql> show tables;
+-----+
| Tables_in_world |
+-----+
| country_new      |
| dup_countries    |
| job_history       |
| jobs             |
+-----+
4 rows in set (0.00 sec)
```

2. Write a SQL statement to add a column region_id to the table locations.

```
mysql> create table locations (region_name varchar(40));
Query OK, 0 rows affected (0.01 sec)

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| region_name | varchar(40) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> alter table locations add(region_id int(20));
Query OK, 0 rows affected, 1 warning (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 1

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id   | int         | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

3. Write a SQL statement to add a column ID as the first column of the table locations.

```
mysql> show columns from locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id   | int        | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> alter table locations add id int first;
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> show columns from locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int       | YES  |     | NULL    |       |
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id   | int       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

4. Write a SQL statement to add a column `region_id` after `state_province` to the table `locations`.


```
mysql> show columns from locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int       | YES  |     | NULL    |       |
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id  | int       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> alter table locations add state_province varchar(20) after region_id;
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int       | YES  |     | NULL    |       |
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id  | int       | YES  |     | NULL    |       |
| state_province | varchar(20) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

5. Write a SQL statement to change the data type of the column `country_id` to integer in the table `locations`

```
mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | YES  |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state_province | varchar(20)   | YES  |     | NULL    |       |
| column_id      | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> alter table locations modify column_id int;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | YES  |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state_province | varchar(20)   | YES  |     | NULL    |       |
| column_id      | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

6. Write a SQL statement to drop the column city from the table locations.

```
mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | YES  |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state_province | varchar(20)   | YES  |     | NULL    |       |
| column_id      | int           | YES  |     | NULL    |       |
| city           | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> alter table locations drop city;
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | YES  |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state_province | varchar(20)   | YES  |     | NULL    |       |
| column_id      | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

7. Write a SQL statement to change the name of the column `state_province` to `state`, keeping the data type and size same.

```
mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | YES  |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state_province | varchar(20)   | YES  |     | NULL    |       |
| column_id      | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> alter table locations drop state_province, add state varchar(20)
after region_id;
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | YES  |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state          | varchar(20)   | YES  |     | NULL    |       |
| column_id      | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

8. Write a SQL statement to add a primary key for the columns location_id in the locations table.

```
mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int       | YES  |     | NULL    |       |
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id  | int       | YES  |     | NULL    |       |
| state      | varchar(20) | YES  |     | NULL    |       |
| column_id  | int       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> alter table locations add primary key(id);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int       | NO   | PRI | NULL    |       |
| region_name | varchar(40) | YES  |     | NULL    |       |
| region_id  | int       | YES  |     | NULL    |       |
| state      | varchar(20) | YES  |     | NULL    |       |
| column_id  | int       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Here are the sample table employees.

Sample table: employees

```
-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+
| EMPLOYEE_ID | FIRST_NAME | LAST_NAME | EMAIL |
PHONE_NUMBER | HIRE_DATE | JOB_ID | SALARY |
COMMISSION_PCT | MANAGER_ID | DEPARTMENT_ID |
+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 |
AD_PRES | 24000.00 | 0.00 | 0 | 90 |
| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 |
AD_VP | 17000.00 | 0.00 | 100 | 90 |
| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 |
AD_VP | 17000.00 | 0.00 | 100 | 90 |
```

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 |
IT_PROG | 9000.00 | 0.00 | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 |
IT_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 |
IT_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 |
IT_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 |
IT_PROG | 4200.00 | 0.00 | 103 | 60 |

| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 |
FI_MGR | 12000.00 | 0.00 | 101 | 100 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 |
FI_ACCOUNT | 9000.00 | 0.00 | 108 | 100 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1987-06-27 |
FI_ACCOUNT | 8200.00 | 0.00 | 108 | 100 |

| 111 | Ismael | Sciarra | ISCIARRA | 515.124.4369 | 1987-06-28 |
FI_ACCOUNT | 7700.00 | 0.00 | 108 | 100 |

| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469 | 1987-06-29 |
FI_ACCOUNT | 7800.00 | 0.00 | 108 | 100 |

| 113 | Luis | Popp | LPOPP | 515.124.4567 | 1987-06-30 |
FI_ACCOUNT | 6900.00 | 0.00 | 108 | 100 |

| 114 | Den | Raphaely | DRAPHEAL | 515.127.4561 | 1987-07-01 |
PU_MAN | 11000.00 | 0.00 | 100 | 30 |

| 115 | Alexander | Khoo | AKHOO | 515.127.4562 | 1987-07-02 |
PU_CLERK | 3100.00 | 0.00 | 114 | 30 |

| 116 | Shelli | Baida | SBAIDA | 515.127.4563 | 1987-07-03 |
PU_CLERK | 2900.00 | 0.00 | 114 | 30 |

| 117 | Sigal | Tobias | STOBIAS | 515.127.4564 | 1987-07-04 |
PU_CLERK | 2800.00 | 0.00 | 114 | 30 |

148	Gerald	Cambrault	GCAMBRAU	011.44.1344.619268	1987-08-04
SA_MAN	11000.00	0.30	100	80	
149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	1987-08-05
SA_MAN	10500.00	0.20	100	80	
150	Peter	Tucker	PTUCKER	011.44.1344.129268	1987-08-06
SA_REP	10000.00	0.30	145	80	
151	David	Bernstein	DBERNSTE	011.44.1344.345268	1987-08-07
SA_REP	9500.00	0.25	145	80	
152	Peter	Hall	PHALL	011.44.1344.478968	1987-08-08
SA_REP	9000.00	0.25	145	80	
153	Christopher	Olsen	COLSEN	011.44.1344.498718	1987-08-09
SA_REP	8000.00	0.20	145	80	
154	Nanette	Cambrault	NCAMBRAU	011.44.1344.987668	1987-08-10
SA_REP	7500.00	0.20	145	80	
155	Oliver	Tuvault	OTUVAULT	011.44.1344.486508	1987-08-11
SA_REP	7000.00	0.15	145	80	
156	Janette	King	JKING	011.44.1345.429268	1987-08-12
SA_REP	10000.00	0.35	146	80	
157	Patrick	Sully	PSULLY	011.44.1345.929268	1987-08-13
SA_REP	9500.00	0.35	146	80	
158	Allan	McEwen	AMCEWEN	011.44.1345.829268	1987-08-14
SA_REP	9000.00	0.35	146	80	
159	Lindsey	Smith	LSMITH	011.44.1345.729268	1987-08-15
SA_REP	8000.00	0.30	146	80	
160	Louise	Doran	LDORAN	011.44.1345.629268	1987-08-16
SA_REP	7500.00	0.30	146		

9. Write a SQL statement to add a primary key for a combination of columns location_id and country_id.

```
mysql> alter table locations add primary key (location_id,country_id);
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc locations;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int           | NO   |     | NULL    |       |
| region_name    | varchar(40)   | YES  |     | NULL    |       |
| region_id      | int           | YES  |     | NULL    |       |
| state          | varchar(20)   | YES  |     | NULL    |       |
| column_id      | int           | YES  |     | NULL    |       |
| country_id     | int           | NO   | PRI | NULL    |       |
| location_id    | int           | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

10. Write a SQL statement to drop the existing primary from the table locations on a combination of columns location_id and country_id.


```
mysql> alter table locations drop primary key;
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc locations;
```

Field	Type	Null	Key	Default	Extra
id	int	NO		NULL	
region_name	varchar(40)	YES		NULL	
region_id	int	YES		NULL	
state	varchar(20)	YES		NULL	
column_id	int	YES		NULL	

```
5 rows in set (0.01 sec)
```

11. Write a SQL statement to add a foreign key on the job_id column of the job_history table referencing the primary key job_id of the jobs table.

```
mysql> alter table job_history add foreign key (job_id) references jobs(job_id);
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc job_history;
```

Field	Type	Null	Key	Default	Extra
employee_id	decimal(10,0)	NO		NULL	
start_date	date	NO		NULL	
end_date	date	NO		NULL	
job_id	varchar(20)	NO	MUL	NULL	
department_id	decimal(10,0)	NO		NULL	

```
5 rows in set (0.00 sec)
```

12. Write a SQL statement to add a foreign key constraint named fk_job_id on the job_id column of the job_history table referencing the primary key job_id of jobs table.

```
mysql> alter table job_history add constraint fk_job_id foreign key (job_id) references jobs (job_id) on update restrict on delete cascade;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc job_history;
```

Field	Type	Null	Key	Default	Extra
employee_id	decimal(10,0)	NO		NULL	
start_date	date	NO		NULL	
end_date	date	NO		NULL	
job_id	varchar(20)	NO	MUL	NULL	
department_id	decimal(10,0)	NO		NULL	

```
5 rows in set (0.00 sec)
```

13. Write a SQL statement to drop the existing foreign key `fk_job_id` from the `job_history` table on the `job_id` column which is referencing the `job_id` of `jobs` table.

```
mysql> alter table job_history drop foreign key fk_job_id;
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc job_history;
```

Field	Type	Null	Key	Default	Extra
employee_id	decimal(10,0)	NO		NULL	
start_date	date	NO		NULL	
end_date	date	NO		NULL	
job_id	varchar(20)	NO	MUL	NULL	
department_id	decimal(10,0)	NO		NULL	

```
5 rows in set (0.00 sec)
```

14. Write a SQL statement to add an index named `indx_job_id` on `job_id` column in the table `job_history`.

```
mysql> alter table job_history add index indx_job_id(job_id);
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc job_history;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| employee_id    | decimal(10,0) | NO   |     | NULL    |       |
| start_date     | date          | NO   |     | NULL    |       |
| end_date       | date          | NO   |     | NULL    |       |
| job_id         | varchar(20)   | NO   | MUL | NULL    |       |
| department_id  | decimal(10,0) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

15. Write a SQL statement to drop the index indx_job_id from job_history table.

```
mysql> alter table job_history drop index indx_job_id;
ERROR 1553 (HY000): Cannot drop index 'indx_job_id': needed in a foreign key constraint
mysql> _
```