

```
mysql> use hr;
```

Database changed

```
mysql> create table regions(region_id int primary key,region_name varchar(10));
```

Query OK, 0 rows affected (0.07 sec)

```
mysql> desc regions;
```

Field	Type	Null	Key	Default	Extra
region_id	int	NO	PRI	NULL	
region_name	varchar(10)	YES		NULL	

2 rows in set (0.03 sec)

```
mysql> create table countries(country_id int primary key,country_name varchar(10));
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> alter table countries add region_id int ;
```

Query OK, 0 rows affected (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc countries;
```

Field	Type	Null	Key	Default	Extra
country_id	int	NO	PRI	NULL	
country_name	varchar(10)	YES		NULL	
region_id	int	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> alter table countries add constraint regions_fk foreign key(region_id) references
regions(region_id) ;
```

Query OK, 0 rows affected (0.10 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc countries;
```

Field	Type	Null	Key	Default	Extra
country_id	int	NO	PRI	NULL	
country_name	varchar(10)	YES		NULL	
region_id	int	YES	MUL	NULL	

3 rows in set (0.00 sec)

```
mysql> create table locations(location_id int primary key,street_address varchar(20),postal_code
int,city varchar(15), state_province varchar(15),country_id int);
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> alter table locations add constraint countries_fk foreign key(country_id) references
countries(country_id) ;
```

Query OK, 0 rows affected (0.11 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc locations;
```

Field	Type	Null	Key	Default	Extra
location_id	int	NO	PRI	NULL	
street_address	varchar(20)	YES		NULL	
postal_code	int	YES		NULL	

city	varchar(15)	YES		NULL		
state_province	varchar(15)	YES		NULL		
country_id	int	YES	MUL	NULL		

```
+-----+-----+-----+-----+-----+
```

6 rows in set (0.00 sec)

```
mysql> create table departments(dept_id int primary key,dept_name varchar(15),manager_id int
,location_id int);
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> alter table departments add constraint locations_fk foreign key(location_id) references
locations(location_id) ;
```

Query OK, 0 rows affected (0.08 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc departments;
```

Field	Type	Null	Key	Default	Extra
dept_id	int	NO	PRI	NULL	
dept_name	varchar(15)	YES		NULL	
manager_id	int	YES		NULL	
location_id	int	YES	MUL	NULL	

```
+-----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

```
mysql> create table jobs(job_id int primary key, job_title varchar(15),min_salary double,max_salary
double);
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> desc jobs;
```

Field	Type	Null	Key	Default	Extra
job_id	int	NO	PRI	NULL	
job_title	varchar(15)	YES		NULL	
min_salary	double	YES		NULL	
max_salary	double	YES		NULL	

4 rows in set (0.00 sec)

```
mysql> create table employees(emp_id int primary key,first_name varchar(10),last_name
varchar(10),email varchar(15), phone_no varchar(15),hire_date date,job_id int,salary
double,commission_pct double,manager_id int ,dept_id int);
```

Query OK, 0 rows affected (0.09 sec)

```
mysql> alter table employees add constraint jobs_fk foreign key(job_id) references jobs(job_id) ;
```

Query OK, 0 rows affected (0.17 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> alter table employees add constraint departments_fk foreign key(dept_id) references
departments(dept_id) ;
```

Query OK, 0 rows affected (0.10 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc employees;
```

Field	Type	Null	Key	Default	Extra
emp_id	int	NO	PRI	NULL	
first_name	varchar(10)	YES		NULL	

last_name	varchar(10)	YES		NULL		
email	varchar(15)	YES		NULL		
phone_no	varchar(15)	YES		NULL		
hire_date	date	YES		NULL		
job_id	int	YES	MUL	NULL		
salary	double	YES		NULL		
commission_pct	double	YES		NULL		
manager_id	int	YES		NULL		
dept_id	int	YES	MUL	NULL		

+-----+-----+-----+-----+-----+

11 rows in set (0.01 sec)

```
mysql> create table job_history(emp_id int,start_date date,end_date date,job_id int ,dept_id
int,primary key(emp_id,start_date));
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> desc job_history;
```

Field	Type	Null	Key	Default	Extra	
-------	------	------	-----	---------	-------	--

+-----+-----+-----+-----+-----+

emp_id	int	NO	PRI	NULL		
start_date	date	NO	PRI	NULL		
end_date	date	YES		NULL		
job_id	int	YES		NULL		
dept_id	int	YES		NULL		

+-----+-----+-----+-----+-----+

5 rows in set (0.01 sec)

```
mysql> alter table job_history add constraint jobs_fk1 foreign key(job_id) references jobs(job_id);
```

Query OK, 0 rows affected (0.10 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> alter table job_history add constraint departments_fk1 foreign key(dept_id) references
departments(dept_id);
```

Query OK, 0 rows affected (0.16 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc job_history;
```

Field	Type	Null	Key	Default	Extra
emp_id	int	NO	PRI	NULL	
start_date	date	NO	PRI	NULL	
end_date	date	YES		NULL	
job_id	int	YES	MUL	NULL	
dept_id	int	YES	MUL	NULL	

5 rows in set (0.00 sec)