1.)create database hr_schema;
2.)use hr_schema;
3.)create table departments(department_id int primary key,department_name
varchar(20),manager_id int,location_id varchar(20));
mysql>desc departments;

```
+-----------------+-------------+------+-----+---------+-------+
| Field           | Type        | Null | Key | Default | Extra |
+-----------------+-------------+------+-----+---------+-------+
| department_id   | int         | NO   | PRI | NULL    |       |
| department_name | varchar(20) | YES  |     | NULL    |       |
| manager_id      | int         | YES  |     | NULL    |       |
| location_id     | int         | YES  |     | NULL    |       |
+-----------------+-------------+------+-----+---------+-------+
```

4.) alter table departments add foreign key(location_id) references locations(location_id);
mysql>desc departments;

```
+-----------------+-------------+------+-----+---------+-------+
| Field           | Type        | Null | Key | Default | Extra |
+-----------------+-------------+------+-----+---------+-------+
| department_id   | int         | NO   | PRI | NULL    |       |
| department_name | varchar(20) | YES  |     | NULL    |       |
| manager_id      | int         | YES  |     | NULL    |       |
| location_id     | int         | YES  | MUL | NULL    |       |
+-----------------+-------------+------+-----+---------+-------+
```
5.)create table locations(location_id int primary key,
street_address varchar(20),postal_code int(20),city varchar(20),state_province
varchar(20),country_id int,foreign key(country_id)references countries(country_id));
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(20) | YES  |     | NULL    |       |
| state_province | varchar(20) | YES  |     | NULL    |       |
| country_id     | int         | YES  | MUL | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
```

6.)create table countries(country_id int primary key,country_name varchar(20),region_id int);
7.)alter table countries add foreign key (region_id) references regions(region_id);

mysql>desc countries;

```
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| country_id   | int         | NO   | PRI | NULL    |       |
| country_name | varchar(20) | YES  |     | NULL    |       |
| region_id    | int         | YES  | MUL | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
```

8.)CREATE TABLE employees (
  employee_id INT PRIMARY KEY,
  first_name VARCHAR(255),
  last_name VARCHAR(255),
  email VARCHAR(255),
  phone_number VARCHAR(255),
  hire_date DATE,
  job_id INT,
  salary FLOAT,
  commission_pct FLOAT,
  manager_id INT,
  department_id INT,
  FOREIGN KEY (job_id)
    REFERENCES jobs(job_id),
  FOREIGN KEY (manager_id)
    REFERENCES employees(employee_id),
  FOREIGN KEY (department_id)
    REFERENCES departments(department_id)
);
mysql>desc employees;

```
+----------------+--------------+------+-----+---------+-------+
| Field          | Type         | Null | Key | Default | Extra |
+----------------+--------------+------+-----+---------+-------+
| employee_id    | int          | NO   | PRI | NULL    |       |
| first_name     | varchar(255) | YES  |     | NULL    |       |
| last_name      | varchar(255) | YES  |     | NULL    |       |
| email          | varchar(255) | YES  |     | NULL    |       |
| phone_number   | varchar(255) | YES  |     | NULL    |       |
| hire_date      | date         | YES  |     | NULL    |       |
| job_id         | int          | YES  | MUL | NULL    |       |
| salary         | float        | YES  |     | NULL    |       |
| commission_pct | float        | YES  |     | NULL    |       |
| manager_id     | int          | YES  | MUL | NULL    |       |
| department_id  | int          | YES  | MUL | NULL    |       |
+----------------+--------------+------+-----+---------+-------+
```

9.)CREATE TABLE job_history (
  employee_id INT,
  start_date DATE,
  end_date DATE,
  job_id INT,
  department_id INT,
  FOREIGN KEY (employee_id)
   REFERENCES employees(employee_id),
  FOREIGN KEY (job_id)
   REFERENCES jobs(job_id),
  FOREIGN KEY (department_id)
   REFERENCES departments(department_id));

mysql> desc job_history;

```
+---------------+------+------+-----+---------+-------+
| Field         | Type | Null | Key | Default | Extra |
+---------------+------+------+-----+---------+-------+
| employee_id   | int  | YES  | MUL | NULL    |       |
| start_date    | date | YES  |     | NULL    |       |
| end_date      | date | YES  |     | NULL    |       |
| job_id        | int  | YES  | MUL | NULL    |       |
| department_id | int  | YES  | MUL | NULL    |       |
+---------------+------+------+-----+---------+-------+
```

10.)create table JOBS (job_id int primary key,job_title varchar(20),min_salary double, max_salary double);
mysql>desc jobs;

```
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| job_id     | int         | NO   | PRI | NULL    |       |
| job_title  | varchar(20) | YES  |     | NULL    |       |
| min_salary | double      | YES  |     | NULL    |       |
| max_salary | double      | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
```

11.)create table regions(region_id int primary key,region_name varchar(20));
mysql> desc regions;

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

```
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| region_id   | int         | NO   | PRI | NULL    |       |
| region_name | varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
```

12.) mysql> alter table job_history add primary key(start_date);
Query OK, 0 rows affected (0.08 sec)
Records: 0 Duplicates: 0 Warnings: 0

13.)mysql> alter table job_history add foreign key(job_id) references jobs(job_id);
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc job_history;
```
+---------------+------+------+-----+---------+-------+
| Field         | Type | Null | Key | Default | Extra |
+---------------+------+------+-----+---------+-------+
| employee_id   | int  | YES  | MUL | NULL    |       |
| start_date    | date | NO   | PRI | NULL    |       |
| end_date      | date | YES  |     | NULL    |       |
| job_id        | int  | YES  | MUL | NULL    |       |
| department_id | int  | YES  | MUL | NULL    |       |
+---------------+------+------+-----+---------+-------+
```

14.)mysql> show tables;
```
+--------------------+
| Tables_in_hr_schema |
+--------------------+
| countries          |
| departments        |
| employees          |
| job_history        |
| jobs               |
| locations          |
| regions            |
+--------------------+
7 rows in set (0.00 sec)
```