

```
CREATE DATABASE incredible;
```

```
USE incredible;
```

```
CREATE TABLE employees(  
  emp_no INT(11) NOT NULL PRIMARY KEY,  
  birth_date DATE,  
  first_name VARCHAR(14),  
  last_name VARCHAR(16),  
  gender ENUM('M','F'),  
  hire_date DATE,  
  dept_no CHAR(4)  
);
```

```
CREATE TABLE departments(  
  dept_no CHAR(4) NOT NULL PRIMARY KEY,  
  dept_name VARCHAR(40),  
  dept_id INT(11),  
  FOREIGN KEY(dept_id) REFERENCES employees(emp_no) ON DELETE SET  
  NULL  
);
```

```
ALTER TABLE employees  
ADD FOREIGN KEY(dept_no)  
REFERENCES departments(dept_no)  
ON DELETE SET NULL;
```

```
CREATE TABLE dept_emp(  
  emp_no INT(11) NOT NULL,  
  dept_no CHAR(4) NOT NULL,  
  from_date DATE,  
  to_date DATE ,  
  PRIMARY KEY (emp_no,dept_no)  
);
```

```
CREATE TABLE dept_manager(  
  emp_no INT(11) NOT NULL,  
  dept_no CHAR(4) NOT NULL,
```

```
from_date DATE,  
to_date DATE,  
PRIMARY KEY (emp_no,dept_no)  
);
```

```
CREATE TABLE salaries(  
emp_no INT(11) NOT NULL PRIMARY KEY,  
salary INT(11),  
from_date DATE,  
to_date DATE  
);
```

```
CREATE TABLE titles(  
emp_no INT(11) NOT NULL PRIMARY KEY,  
title VARCHAR(50),  
from_date DATE ,  
to_date DATE  
);
```

```
SELECT * FROM employees;
```

```
INSERT INTO employees  
VALUES(101, '1999-02-10', 'Brijesh', 'Yadav', 'M', '2019-07-01', NULL);
```

```
INSERT INTO departments VALUES('A1', 'CS', 101);
```

```
UPDATE employees SET dept_no = 'A1' WHERE emp_no = 101;
```

```
INSERT INTO employees  
VALUES(102, '1999-08-02', 'Md', 'Sarmad', 'M', '2019-07-02', NULL);
```

```
INSERT INTO departments VALUES('A2', 'IT', 102);
```

```
UPDATE employees SET dept_no = 'A2' WHERE emp_no = 102;
```

```
INSERT INTO employees  
VALUES(103, '1999-03-10', 'Ishu', 'Ayush', 'M', '2019-04-05', 'A1');
```

```
INSERT INTO employees  
VALUES(104, '1999-11-10', 'Aria', 'Joshi', 'F', '2019-08-05', NULL);
```

```
INSERT INTO departments VALUES('A3', 'ME', 104);
```

```
UPDATE employees SET dept_no = 'A3' WHERE emp_no = 104;
```

```
INSERT INTO employees  
VALUES(105, '1999-06-10', 'Sofia', '', 'F', '2019-04-05', 'A3');
```

```
SELECT * FROM departments;
```

```
INSERT INTO departments VALUES('A4', 'Civil', 105);
```

```
SELECT * FROM dept_emp;
```

```
INSERT INTO dept_emp VALUES(101, 'A1', '2019-07-01', '2020-09-01');  
INSERT INTO dept_emp VALUES(102, 'A2', '2019-07-02', '2021-05-03');  
INSERT INTO dept_emp VALUES(103, 'A1', '2019-04-05', '2021-06-08');  
INSERT INTO dept_emp VALUES(105, 'A3', '2019-05-05', '2021-02-05');  
INSERT INTO dept_emp VALUES(106, 'A6', '2019-07-01', '2021-07-02');
```

```
SELECT * FROM dept_manager;
```

```
INSERT INTO dept_manager  
VALUES(101, 'A1', '2019-07-01', '2020-08-01');  
INSERT INTO dept_manager  
VALUES(102, 'A2', '2019-07-02', '2021-02-03');  
INSERT INTO dept_manager  
VALUES(103, 'A1', '2019-04-05', '2021-01-08');  
INSERT INTO dept_manager  
VALUES(105, 'A3', '2019-05-05', '2021-01-05');  
INSERT INTO dept_manager  
VALUES(106, 'A6', '2019-07-01', '2021-05-02');
```

```
SELECT * FROM salaries;
```

```
INSERT INTO salaries VALUES(101,20000,'2019-07-01','2020-09-01');
INSERT INTO salaries VALUES(102,30000,'2019-07-02','2021-05-03');
INSERT INTO salaries VALUES(103,15000,'2019-04-05','2021-06-08');
INSERT INTO salaries VALUES(104,34000,'2019-08-05','2021-02-05');
INSERT INTO salaries VALUES(106,28000,'2019-07-01','2021-07-02');
```

```
SELECT * FROM titles;
```

```
-- INSERT
```

```
INSERT INTO titles VALUES(101,'Software
Engineer','2019-07-01','2020-09-01');
INSERT INTO titles VALUES(102,'Data
Scientist','2019-07-02','2021-05-03');
INSERT INTO titles VALUES(103,'Project
Head','2019-04-05','2021-06-08');
INSERT INTO titles
VALUES(104,'Manager','2019-08-05','2021-02-05');
INSERT INTO titles
VALUES(105,'Architect','2019-05-05','2021-02-05');
```

```
-- READ
```

```
SELECT * FROM titles;
```

```
-- UPDATE
```

```
UPDATE titles SET title = 'Data Analyst' WHERE emp_no = 103;
```

```
-- DELETE
```

```
DELETE FROM titles WHERE emp_no = 105;
```