

## #1 Fundamentals of Data Management

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### Credit Task 5.2.1

Company Database Relations

```
1 CREATE DATABASE test;
2 USE test;
3
4 CREATE TABLE Employee
5 (
6     emp_id INT(10) UNSIGNED not null,
7     emp_fname VARCHAR(30) not null,
8     emp_lname VARCHAR(30) not null,
9     emp_bdate DATE not null,
10    emp_address VARCHAR(255) not null,
11    emp_gender CHAR(1) CHECK(emp_gender = 'M' OR emp_gender = 'F' OR
emp_gender = 'U'),
12    dept_id INT(10) UNSIGNED not null,
13    super_id INT(10) UNSIGNED not null,
14
15    PRIMARY KEY(emp_id),
16    FOREIGN KEY(dept_id) REFERENCES Department(dept_id),
17    FOREIGN KEY(super_id) REFERENCES Employee(emp_id)
18 );
19
20 CREATE TABLE Department
21 (
22     dept_id INT(10) UNSIGNED not null,
23     dept_name VARCHAR(40) not null,
24     mgr_id INT(10) UNSIGNED not null,
25     mgr_start_date DATE not null,
26
27     PRIMARY KEY(dept_id),
28     FOREIGN KEY(mgr_id) REFERENCES Employee(emp_id)
29 );
30
31 CREATE TABLE Project
32 (
33     proj_id INT(10) UNSIGNED not null,
34     proj_name CHAR(40) not null,
35     proj_loc CHAR(40) not null,
36     dept_id INT(10) UNSIGNED not null,
37
38     PRIMARY KEY(proj_id),
39     FOREIGN KEY(dept_id) REFERENCES Department(dept_id)
40 );
41
42 CREATE TABLE works_on
43 (
44     proj_id INT(10) UNSIGNED not null,
45     emp_id INT(10) UNSIGNED not null,
46     role CHAR(30) not null,
47     salary_factor DECIMAL(2,1) not null DEFAULT 0 CHECK(salary_factor >=
0.00),
48     hours FLOAT UNSIGNED not null,
49     role_comment VARCHAR(255) not null,
50
51     PRIMARY KEY(proj_id, emp_id),
52     FOREIGN KEY(proj_id) REFERENCES Project(proj_id),
53     FOREIGN KEY(emp_id) REFERENCES Employee(emp_id)
54 );
55
56 CREATE TABLE salary
```

```
57 (
58     emp_id INT(10) UNSIGNED not null,
59     salary DECIMAL(20,4) UNSIGNED not null,
60     start_date DATE not null,
61
62     PRIMARY KEY(emp_id, start_date),
63     FOREIGN KEY(emp_id) references Employee(emp_id)
64 );
65
```