

```
mysql> USE EMP_DETAILS;
```

```
mysql> SHOW TABLES;
```

```
+-----+
| Tables_in_EMP_DETAILS |
+-----+
| DEPARTMENT             |
| EMPLOYEE               |
+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM EMPLOYEE;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| ENO | ENAME | SALARY | DNO | MNGRNO | DOJ | JOB | ADDRESS | CITY |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Rex | 60000 | 40 | NULL | 2005-01-19 | SENIOR MANAGER | Address 1 | KOCHI |
| 682022 |
| 2 | Tex | 30000 | 10 | 1 | 2005-01-19 | MANAGER | Address 2 | CHENNAI |
| 682022 |
| 3 | Max | 30000 | 30 | 1 | 1998-01-19 | MANAGER | Address 1 | KOCHI |
| 682022 |
| 4 | Lex | 30000 | 20 | 1 | 2000-01-19 | MANAGER | Address 3 | MUMBAI |
| 682022 |
| 5 | Nex | 30000 | 40 | 1 | 2004-01-19 | MANAGER | Address 2 | CHENNAI |
| 682022 |
| 6 | Ken | 9600 | 10 | 2 | 2000-01-19 | CLERK | Address 1 | KOCHI |
| 682022 |
| 7 | Ten | 7200 | 10 | 2 | 2000-01-19 | QUALITY CHECKER | Address 2 | CHENNAI |
| 682022 |
| 9 | Ram | 8040 | 20 | 4 | 2004-01-19 | CLERK | Address 3 | MUMBAI |
| 682022 |
| 12 | Rohit | 14400 | 20 | 4 | 2000-01-19 | QUALITY CHECKER | Address 3 | MUMBAI |
| 682022 |
| 13 | Jenson | 9600 | 30 | 3 | 1999-01-19 | CLERK | Address 3 | MUMBAI |
| 682022 |
| 14 | Johnson | 8160 | 30 | 3 | 2000-01-19 | WORKER | Address 1 | KOCHI |
| 682022 |
| 16 | Jack | 8400 | 40 | 5 | 2009-01-19 | CLERK | Address 2 | CHENNAI |
| 682022 |
| 17 | Jim | 12000 | 40 | 5 | 1998-01-19 | CLERK | Address 1 | KOCHI |
| 682022 |
| 18 | Jill | 10000 | 40 | 5 | 2010-01-19 | SENIOR CLERK | Address 3 | MUMBAI |
| 682022 |
| 19 | Jin | 24000 | 10 | 1 | 2009-01-19 | MANAGER | Address 3 | MUMBAI |
| 682022 |
| 20 | Kazuya | 18000 | 20 | 1 | 2006-01-19 | MANAGER | Address 1 | KOCHI |
| 682022 |
| 22 | Isayama | 42000 | 40 | 1 | 2005-01-19 | MANAGER | Address 1 | KOCHI |
| 682022 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
17 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM DEPARTMENT;
```

```
+-----+-----+-----+
| DNO | DNAME | D_HOD |
+-----+-----+-----+
| 10 | Marketing | Tex |
| 20 | Sales | Lex |
| 30 | Accounting | Max |
| 40 | Management | Nex |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
UPDATE DEPARTMENT SET D_HOD='Tex' WHERE DNO=10;
Query OK, 1 row affected (0.04 sec)
```

```
mysql> UPDATE DEPARTMENT SET D_HOD='Lex' WHERE DNO=20;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE DEPARTMENT SET D_HOD='Max' WHERE DNO=30;
Query OK, 1 row affected (0.03 sec)
```

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> UPDATE DEPARTMENT SET D_HOD='Nex' WHERE DNO=40;
Query OK, 1 row affected (0.04 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> SELECT * FROM DEPARTMENT;
```

DNO	DNAME	D_HOD
10	Marketing	Tex
20	Sales	Lex
30	Accounting	Max
40	Management	Nex

4 rows in set (0.00 sec)

```
mysql> UPDATE EMPLOYEE SET JOB='PROFESSOR' WHERE ENO=2;
Query OK, 1 row affected (0.04 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE EMPLOYEE SET JOB='ASSOCIATE PROFESSOR' WHERE ENO=3;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE EMPLOYEE SET JOB='ASSISTANT PROFESSOR' WHERE ENO=4;
Query OK, 1 row affected (0.04 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE EMPLOYEE SET JOB='GUEST LECTURER' WHERE ENO=5;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> SELECT * FROM EMPLOYEE;
```

ENO	ENAME PINCODE	SALARY	DNO	MNGRNO	DOJ	JOB	ADDRESS	CITY
1	Rex 682022	60000	40	NULL	2005-01-19	SENIOR MANAGER	Address 1	KOCH
2	Tex 682022	30000	10	1	2005-01-19	PROFESSOR	Address 2	CHEN
3	Max 682022	30000	30	1	1998-01-19	ASSOCIATE PROFESSOR	Address 1	KOCH
4	Lex 682022	30000	20	1	2000-01-19	ASSISTANT PROFESSOR	Address 3	MUMB
5	Nex 682022	30000	40	1	2004-01-19	GUEST LECTURER	Address 2	CHEN
6	Ken 682022	9600	10	2	2000-01-19	CLERK	Address 1	KOCH
7	Ten 682022	7200	10	2	2000-01-19	QUALITY CHECKER	Address 2	CHEN
9	Ram 682022	8040	20	4	2004-01-19	CLERK	Address 3	MUMB
12	Rohit 682022	14400	20	4	2000-01-19	QUALITY CHECKER	Address 3	MUMB
13	Jenson 682022	9600	30	3	1999-01-19	CLERK	Address 3	MUMB
14	Johnson 682022	8160	30	3	2000-01-19	WORKER	Address 1	KOCH
16	Jack 682022	8400	40	5	2009-01-19	CLERK	Address 2	CHEN
17	Jim 682022	12000	40	5	1998-01-19	CLERK	Address 1	KOCH
18	Jill 682022	10000	40	5	2010-01-19	SENIOR CLERK	Address 3	MUMB
19	Jin 682022	24000	10	1	2009-01-19	MANAGER	Address 3	MUMB
20	Kazuya 682022	18000	20	1	2006-01-19	MANAGER	Address 1	KOCH
22	Isayama 682022	42000	40	1	2005-01-19	MANAGER	Address 1	KOCH

17 rows in set (0.00 sec)

mysql> SELECT * FROM DEPARTMENT;

DNO	DNAME	D_HOD
10	Marketing	Tex
20	Sales	Lex
30	Accounting	Max
40	Management	Nex

4 rows in set (0.00 sec)

mysql> SELECT ENAME AS NAME, JOB AS DESIGNATION, DNAME AS DEPARTMENT FROM EMPLOYEE, DEPARTMENT WHERE ENAME=D_HOD;

NAME	DESIGNATION	DEPARTMENT
Tex	PROFESSOR	Marketing
Max	ASSOCIATE PROFESSOR	Accounting
Lex	ASSISTANT PROFESSOR	Sales
Nex	GUEST LECTURER	Management

4 rows in set (0.00 sec)

mysql> INSERT INTO DEPARTMENT VALUES(50, 'Human Resource', 'John');
Query OK, 1 row affected (0.03 sec)

mysql> SELECT * FROM DEPARTMENT;

DNO	DNAME	D_HOD
10	Marketing	Tex
20	Sales	Lex
30	Accounting	Max
40	Management	Nex
50	Human Resource	John

5 rows in set (0.00 sec)

mysql> SELECT * FROM EMPLOYEE LEFT OUTER JOIN DEPARTMENT ON EMPLOYEE.DNO=DEPARTMENT.DNO;

ENO	ENAME	SALARY	DNO	MNGRNO	DOJ	JOB	ADDRESS	CITY
PINCODE	DNO	DNAME	D_HOD					
2	Tex	30000	10	1	2005-01-19	PROFESSOR	Address 2	CHEN
6	Ken	9600	10	2	2000-01-19	CLERK	Address 1	KOCH
7	Ten	7200	10	2	2000-01-19	QUALITY CHECKER	Address 2	CHEN
19	Jin	24000	10	1	2009-01-19	MANAGER	Address 3	MUMB
4	Lex	30000	20	1	2000-01-19	ASSISTANT PROFESSOR	Address 3	MUMB
9	Ram	8040	20	4	2004-01-19	CLERK	Address 3	MUMB
12	Rohit	14400	20	4	2000-01-19	QUALITY CHECKER	Address 3	MUMB
20	Kazuya	18000	20	1	2006-01-19	MANAGER	Address 1	KOCH
3	Max	30000	30	1	1998-01-19	ASSOCIATE PROFESSOR	Address 1	KOCH
13	Jenson	9600	30	3	1999-01-19	CLERK	Address 3	MUMB
14	Johnson	8160	30	3	2000-01-19	WORKER	Address 1	KOCH
1	Rex	60000	40	NULL	2005-01-19	SENIOR MANAGER	Address 1	KOCH
5	Nex	30000	40	1	2004-01-19	GUEST LECTURER	Address 2	CHEN
16	Jack	8400	40	5	2009-01-19	CLERK	Address 2	CHEN
17	Jim	12000	40	5	1998-01-19	CLERK	Address 1	KOCH

```

I | 682022 | 40 | Management | Nex |
18 | Jill | 10000 | 40 | 5 | 2010-01-19 | SENIOR CLERK | Address 3 | MUMB
AI | 682022 | 40 | Management | Nex |
22 | Isayama | 42000 | 40 | 1 | 2005-01-19 | MANAGER | Address 1 | KOCH
I | 682022 | 40 | Management | Nex |
+-----+-----+-----+-----+-----+-----+-----+-----+
17 rows in set (0.00 sec)

```

```
mysql> SELECT * FROM EMPLOYEE RIGHT OUTER JOIN DEPARTMENT ON EMPLOYEE.DNO=DEPARTMENT.DNO;
```

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| ENO | ENAME | SALARY | DNO | MNGRNO | DOJ | JOB | ADDRESS | CIT |
Y | PINCODE | DNO | DNAME | | D_HOD | | | |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 2 | Tex | 30000 | 10 | 1 | 2005-01-19 | PROFESSOR | Address 2 | CHE
NNAI | 682022 | 10 | Marketing | Tex |
6 | Ken | 9600 | 10 | 2 | 2000-01-19 | CLERK | Address 1 | KOC
HI | 682022 | 10 | Marketing | Tex |
7 | Ten | 7200 | 10 | 2 | 2000-01-19 | QUALITY CHECKER | Address 2 | CHE
NNAI | 682022 | 10 | Marketing | Tex |
19 | Jin | 24000 | 10 | 1 | 2009-01-19 | MANAGER | Address 3 | MUM
BAI | 682022 | 10 | Marketing | Tex |
4 | Lex | 30000 | 20 | 1 | 2000-01-19 | ASSISTANT PROFESSOR | Address 3 | MUM
BAI | 682022 | 20 | Sales | Lex |
9 | Ram | 8040 | 20 | 4 | 2004-01-19 | CLERK | Address 3 | MUM
BAI | 682022 | 20 | Sales | Lex |
12 | Rohit | 14400 | 20 | 4 | 2000-01-19 | QUALITY CHECKER | Address 3 | MUM
BAI | 682022 | 20 | Sales | Lex |
20 | Kazuya | 18000 | 20 | 1 | 2006-01-19 | MANAGER | Address 1 | KOC
HI | 682022 | 20 | Sales | Lex |
3 | Max | 30000 | 30 | 1 | 1998-01-19 | ASSOCIATE PROFESSOR | Address 1 | KOC
HI | 682022 | 30 | Accounting | Max |
13 | Jenson | 9600 | 30 | 3 | 1999-01-19 | CLERK | Address 3 | MUM
BAI | 682022 | 30 | Accounting | Max |
14 | Johnson | 8160 | 30 | 3 | 2000-01-19 | WORKER | Address 1 | KOC
HI | 682022 | 30 | Accounting | Max |
1 | Rex | 60000 | 40 | NULL | 2005-01-19 | SENIOR MANAGER | Address 1 | KOC
HI | 682022 | 40 | Management | Nex |
5 | Nex | 30000 | 40 | 1 | 2004-01-19 | GUEST LECTURER | Address 2 | CHE
NNAI | 682022 | 40 | Management | Nex |
16 | Jack | 8400 | 40 | 5 | 2009-01-19 | CLERK | Address 2 | CHE
NNAI | 682022 | 40 | Management | Nex |
17 | Jim | 12000 | 40 | 5 | 1998-01-19 | CLERK | Address 1 | KOC
HI | 682022 | 40 | Management | Nex |
18 | Jill | 10000 | 40 | 5 | 2010-01-19 | SENIOR CLERK | Address 3 | MUM
BAI | 682022 | 40 | Management | Nex |
22 | Isayama | 42000 | 40 | 1 | 2005-01-19 | MANAGER | Address 1 | KOC
HI | 682022 | 40 | Management | Nex |
L | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NUL
L | NULL | 50 | Human Resource | John |
+-----+-----+-----+-----+-----+-----+-----+-----+
18 rows in set (0.00 sec)

```

```
mysql> SELECT * FROM EMPLOYEE LEFT OUTER JOIN DEPARTMENT ON EMPLOYEE.DNO=DEPARTMENT.DNO UNION
SELECT * FROM EMPLOYEE RIGHT OUTER JOIN DEPARTMENT ON EMPLOYEE.DNO=DEPARTMENT.DNO;
```

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| ENO | ENAME | SALARY | DNO | MNGRNO | DOJ | JOB | ADDRESS | CIT |
Y | PINCODE | DNO | DNAME | | D_HOD | | | |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 2 | Tex | 30000 | 10 | 1 | 2005-01-19 | PROFESSOR | Address 2 | CHE
NNAI | 682022 | 10 | Marketing | Tex |
6 | Ken | 9600 | 10 | 2 | 2000-01-19 | CLERK | Address 1 | KOC
HI | 682022 | 10 | Marketing | Tex |
7 | Ten | 7200 | 10 | 2 | 2000-01-19 | QUALITY CHECKER | Address 2 | CHE
NNAI | 682022 | 10 | Marketing | Tex |
19 | Jin | 24000 | 10 | 1 | 2009-01-19 | MANAGER | Address 3 | MUM
BAI | 682022 | 10 | Marketing | Tex |
4 | Lex | 30000 | 20 | 1 | 2000-01-19 | ASSISTANT PROFESSOR | Address 3 | MUM
BAI | 682022 | 20 | Sales | Lex |
9 | Ram | 8040 | 20 | 4 | 2004-01-19 | CLERK | Address 3 | MUM
BAI | 682022 | 20 | Sales | Lex |

```

BAI	12	Rohit	14400	20	4	2000-01-19	QUALITY CHECKER	Address 3	MUM
HI	20	Kazuya	18000	20	1	2006-01-19	MANAGER	Address 1	KOC
HI	3	Max	30000	30	1	1998-01-19	ASSOCIATE PROFESSOR	Address 1	KOC
BAI	13	Jenson	9600	30	3	1999-01-19	CLERK	Address 3	MUM
HI	14	Johnson	8160	30	3	2000-01-19	WORKER	Address 1	KOC
HI	1	Rex	60000	40	NULL	2005-01-19	SENIOR MANAGER	Address 1	KOC
NNAI	5	Nex	30000	40	1	2004-01-19	GUEST LECTURER	Address 2	CHE
NNAI	16	Jack	8400	40	5	2009-01-19	CLERK	Address 2	CHE
HI	17	Jim	12000	40	5	1998-01-19	CLERK	Address 1	KOC
BAI	18	Jill	10000	40	5	2010-01-19	SENIOR CLERK	Address 3	MUM
HI	22	Isayama	42000	40	1	2005-01-19	MANAGER	Address 1	KOC
L	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NUL
		50	Human Resource	John					

18 rows in set (0.00 sec)