

1 >>>>>>>>>>>>>>>.

```
Local instance 3306
Monish_SQL_TEST*
40
47 #experience, hiredate, date of birth , dept name, title > unique
48 • ALTER TABLE EMPLOYEE CHANGE DATE_OF_BIRTH DATE_OF_BIRTH DATE NOT NULL UNIQUE;
49 • ALTER TABLE DEPARTMENT CHANGE DEPT_NAME DEPT_NAME VARCHAR(25) UNIQUE ;
50 • ALTER TABLE EMPLOYEE CHANGE HIRE_DATE HIRE_DATE DATE UNIQUE;
51 • ALTER TABLE JOBS CHANGE JOB_TITLE JOB_TITLE VARCHAR(20) UNIQUE;
52 • ALTER TABLE EMPLOYEE CHANGE Experience Experience INT UNIQUE;
53
54
55 # CHECK MAX_SALARY <= 60000, MIN_SALARY >=4000,
56 • ALTER TABLE JOBS CHANGE MAX_SALARY MAX_SALARY INT CHECK (MAX_SALARY <= 60000);
57 • ALTER TABLE JOBS CHANGE MIN_SALARY MIN_SALARY INT CHECK (MIN_SALARY >= 4000);
58
59
60 # FOREIGN KEY
61
62 • ALTER TABLE EMPLOYEE ADD CONSTRAINT DEPT_NAME FOREIGN KEY (DEPT_NAME) REFERENCES DEPARTMENT(DEPT_NAME);
-- ALTER TABLE DEPARTMENT
64
65 # OUTPUT FOR Q-1
66 • DESCRIBE EMPLOYEE;
67 • DESCRIBE JOBS;
-- DESCRIBE DEPARTMENT;
```

Result Grid Filter Rows: Search Export:

Field	Type	Null	Key	Default	Extra
LAST_NAME	varchar(20)	YES		NULL	
HIRE_DATE	date	YES	UNI	NULL	
JOB_ID	varchar(10)	YES		NULL	
SALARY	int	YES		NULL	
Experience	int	YES	UNI	NULL	
COMMISSION	int	YES		NULL	
MANAGER_ID	int	YES		NULL	
DEPT_ID	varchar(10)	YES		NULL	
EMP_ID	int	NO	PRI	NULL	
FIRST_NAME	varchar(20)	NO		NULL	
PH_NUMBER	varchar(20)	NO		NULL	
DATE_OF_BIRTH	date	NO	UNI	NULL	

```
68 # FOREIGN KEY

ALTER TABLE EMPLOYEE ADD CONSTRAINT DEPT_NAME FOREIGN KEY (DEPT_NAME) RI
-- ALTER TABLE DEPARTMENT

# OUTPUT FOR Q-1
66 • DESCRIBE EMPLOYEE;
DESCRIBE JOBS;
DESCRIBE DEPARTMENT;
```

Result Grid Filter Rows: Search Export:

Field	Type	Null	Key	Default	Extra
JOB_ID	varchar(20)	NO	PRI	NULL	
JOB_TITLE	varchar(20)	YES	UNI	NULL	
MIN_SALARY	int	YES		NULL	
MAX_SALARY	int	YES		NULL	

Local instance 3306

SQL DDL DML Reports Job History Monish\_SQL\_TEST\*

Limit to 1000 rows

```
50 • ALTER TABLE DEPARTMENT CHANGE DEPT_NAME DEPT_NAME VARCHAR(25) UNIQUE ;
51 • ALTER TABLE EMPLOYEE CHANGE HIRE_DATE HIRE_DATE DATE UNIQUE;
52 • ALTER TABLE JOBS CHANGE JOB_TITLE JOB_TITLE VARCHAR(20) UNIQUE;
53 • ALTER TABLE EMPLOYEE CHANGE Experience Experience INT UNIQUE;
54
55 # CHECK MAX_SALARY <= 60000, MIN_SALARY >=4000,
56 • ALTER TABLE JOBS CHANGE MAX_SALARY MAX_SALARY INT CHECK (MAX_SALARY <= 60000);
57 • ALTER TABLE JOBS CHANGE MIN_SALARY MIN_SALARY INT CHECK (MIN_SALARY >= 4000);
58
59
60 # FOREIGN KEY
61
62 • ALTER TABLE EMPLOYEE ADD CONSTRAINT DEPT_NAME FOREIGN KEY (DEPT_NAME) REFERENCES DEPARTMENT(DEPT_NAME);
63 -- ALTER TABLE DEPARTMENT
64
65 # OUTPUT FOR Q-1
66 • DESCRIBE EMPLOYEE;
67 • DESCRIBE JOBS;
68 • DESCRIBE DEPARTMENT;
69
70 #OUTPUT Q-3 A
71
```

16:68 | 1 error found

Result Grid Filter Rows: Search Export:

Field	Type	Null	Key	Default	Extra
DEPT_ID	int	YES		NULL	
DEPT_NAME	varchar(25)	YES	UNI	NULL	
LOCATION	varchar(20)	NO		NULL	

Local instance 3306

Monish\_SQL\_TEST\*

```

15   (102, 'Alexander', 'Hunold', '55555555', '1977-10-14', '2007-04-01', '1001', 50000, 15, 0, 1002, 20),
16   (103, 'Bruce', 'Ernst', '6666666', '1967-03-07', '1990-07-01', '1004', 25000, 32, 0, 1002, 40),
17   (104, 'David', 'Austin', '77777777', '1986-03-02', '2018-05-08', '1005', 15000, 4, 0, 1002, 50),
18   (105, 'Valli', 'Pataballa', '88888888', '1990-02-17', '2015-07-10', '1003', 40000, 7, 0, 1003, 30),
19   (106, 'Diana', 'Lorentz', '11111111', '1996-02-20', '2021-12-01', '1001', 60000, 1, 0, 1002, 20);

20   INSERT INTO JOBS VALUES
21     ("1001", "Officer", 8000, 50000),
22     ("1002", "Manager", 8000, 60000),
23     ("1003", "Admin", 8000, 40000),
24     ("1004", "Security", 5000, 25000),
25     ("1005", "Office Boy", 5000, 15000);

26   INSERT INTO DEPARTMENT VALUES
27     (20, "Research and Development", "Mumbai"),
28     (30, "Administration", "Mumbai"),
29     (40, "Security", "Mumbai"),
30     (50, "Helper", "Mumbai"),
31     (60, "Finance", "Mumbai"),
32     (70, "Quality Assurance", "Mumbai");
33
34
35
36

```

14:38 | 1 error found

Result Grid | Filter Rows:  Search | Edit: Export/Import:

JOB_ID	JOB_TITLE	MIN_SALARY	MAX_SALARY
1001	Officer	8000	50000
1002	Manager	8000	60000
1003	Admin	8000	40000
1004	Security	5000	25000
1005	Office Boy	5000	15000
	HULL	HULL	HULL

Local instance 3306

Monish\_SQL\_TEST\*

```

58
59   # FOREIGN KEY
60
61 • ALTER TABLE EMPLOYEE ADD CONSTRAINT DEPT_NAME FOREIGN KEY (DEPT_NAME) REFERENCES DEPARTMENT(DEPT_NAME);
62 -- ALTER TABLE DEPARTMENT
63
64
65   # OUTPUT FOR Q-1
66 • DESCRIBE EMPLOYEE;
67 • DESCRIBE JOBS;
68 • DESCRIBE DEPARTMENT;
69
70   #OUTPUT Q-3 A
71
72 • SELECT EMP_ID, FIRST_NAME, LAST_NAME, FLOOR(DATEDIFF(CURDATE(), DATE_OF_BIRTH) / 365) AS AGE FROM EMPLOYEE;
73
74
75   # OUTPUT Q-3B
76
77 • SELECT EMP_ID, FIRST_NAME, LAST_NAME
78
79   #OUT PUT Q-3 C
80 • SELECT EMP_ID, FIRST_NAME, LAST_NAME FROM EMPLOYEE WHERE LENGTH('2024-09-25') - LENGTH(BIRTH_DATE) > 60;
81
82

```

10:72 | 1 error found

Result Grid | Filter Rows:  Search | Export:

EMP_ID	FIRST_NAME	LAST_NAME	AGE
100	Neena	Kochhar	49
101	Lex	De Haan	42
102	Alexander	Hunold	46
103	Bruce	Ernst	57
104	David	Austin	38
105	Valli	Pataballa	34
106	Diana	Lorentz	28

### 3 A - F

Local instance 3306

Monish\_SQL\_TEST\*

```
(106, 'Diana', 'Lorentz', '11111111', '1996-02-20', '2021-12-01', '1001', 60000, 1, 0, 1002, 20);

INSERT INTO JOBS VALUES
("1001", "Officer", 8000, 50000),
("1002", "Manager", 8000, 60000),
("1003", "Admin", 8000, 40000),
("1004", "Security", 5000, 25000),
("1005", "Office Boy", 5000, 15000);

INSERT INTO DEPARTMENT VALUES
(20, "Research and Development", "Mumbai"),
(30, "Administration", "Mumbai"),
(40, "Security", "Mumbai"),
(50, "Helper", "Mumbai"),
(60, "Finance", "Mumbai"),
(70, "Quality Assurance", "Mumbai");

# OUTPUT Q-2
SELECT * FROM EMPLOYEE;
SELECT * FROM JOBS;
SELECT * FROM DEPARTMENT;
```

17:39 | 1 error found

Result Grid

DEPT_ID	DEPT_NAME	LOCATION
20	Research and Development	Mumbai
30	Administration	Mumbai
40	Security	Mumbai
50	Helper	Mumbai
60	Finance	Mumbai
70	Quality Assurance	Mumbai

MySQLWorkbench

Local instance 3306

Monish\_SQL\_TEST\*

```
ALTER TABLE JOBS CHANGE MIN_SALARY MIN_SALARY INT CHECK (MIN_SALARY >= 4000);
# FOREIGN KEY
ALTER TABLE EMPLOYEE ADD CONSTRAINT DEPT_NAME FOREIGN KEY (DEPT_NAME) REFERENCES DEPARTMENT(DEPT_NAME);
-- ALTER TABLE DEPARTMENT
# OUTPUT FOR Q-1
DESCRIBE EMPLOYEE;
DESCRIBE JOBS;
DESCRIBE DEPARTMENT;
#OUTPUT Q-3 A
SELECT EMP_ID, FIRST_NAME, LAST_NAME, FLOOR(DATEDIFF(CURDATE(), DATE_OF_BIRTH) / 365) AS AGE FROM EMPLOYEE;
# OUTPUT Q-3B
SELECT EMPLOYEE.EMP_ID, EMPLOYEE.FIRST_NAME, EMPLOYEE.LAST_NAME, DEPARTMENT.DEPT_NAME, EMPLOYEE.SALARY FROM DEPARTMENT LEFT JOIN EMPLOYEE ON DEPARTMENT.DEPT_ID = EMPLOYEE.DEPT_ID;
```

17:44 | 1 error found

Result Grid

EMP_ID	FIRST_NAME	LAST_NAME	DEPT_NAME	SALARY
106	Diana	Lorentz	Research and Development	60000
102	Alexander	Hunold	Research and Development	50000
101	Lex	De Haan	Research and Development	50000
100	Neena	Kochhar	Research and Development	50000
105	Valli	Pataballa	Administration	40000
103	Bruce	Ernst	Security	25000
104	David	Austin	Helper	15000
			Finance	
			Quality Assurance	

MySQLWorkbench File Edit View Query Database Server Tools Scripting Help

Local Instance 3306

Monish\_SQL\_TEST\*

Limit to 1000 rows

```
# FOREIGN KEY

ALTER TABLE EMPLOYEE ADD CONSTRAINT DEPT_NAME FOREIGN KEY (DEPT_NAME) REFERENCES DEPARTMENT(DEPT_NAME);
-- ALTER TABLE DEPARTMENT

# OUTPUT FOR Q-1
DESCRIBE EMPLOYEE;
DESCRIBE JOBS;
DESCRIBE DEPARTMENT;

#OUTPUT Q-3 A
71
72 • SELECT EMP_ID, FIRST_NAME, LAST_NAME, FLOOR(DATEDIFF(CURDATE(),DATE_OF_BIRTH) / 365) AS AGE FROM EMPLOYEE;
73
74
75 # OUTPUT Q-3B
76
77 • SELECT EMPLOYEE.EMP_ID, EMPLOYEE.FIRST_NAME, EMPLOYEE.LAST_NAME, DEPARTMENT.DEPT_NAME, EMPLOYEE.SALARY FROM DEPARTMENT LEFT JOIN EMPLOYEE ON DEPARTMENT.DEPT_ID = EMPLOYEE.DEPT_ID;
78
79 #OUT PUT Q-3 C
80 • SELECT EMP_ID, FIRST_NAME, LAST_NAME FROM EMPLOYEE WHERE (FLOOR(DATEDIFF(CURDATE(),DATE_OF_BIRTH) / 365)) >= 60;
81
```

38:80

Result Grid Filter Rows: Q Search Edit: Export/Import:

EMP_ID	FIRST_NAME	LAST_NAME
NULL	NULL	NULL

MySQLWorkbench File Edit View Query Database Server Tools Scripting Help

Local Instance 3306

Monish\_SQL\_TEST\*

Limit to 1000 rows

```
-- ALTER TABLE DEPARTMENT

-- # OUTPUT FOR Q-1
DESCRIBE EMPLOYEE;
DESCRIBE JOBS;
DESCRIBE DEPARTMENT;

#OUTPUT Q-3 A

71
72 • SELECT EMP_ID, FIRST_NAME, LAST_NAME, FLOOR(DATEDIFF(CURDATE(),DATE_OF_BIRTH) / 365) AS AGE FROM EMPLOYEE;
73
74
75 # OUTPUT Q-3B
76
77 • SELECT EMPLOYEE.EMP_ID, EMPLOYEE.FIRST_NAME, EMPLOYEE.LAST_NAME, DEPARTMENT.DEPT_NAME, EMPLOYEE.SALARY FROM DEPARTMENT LEFT JOIN EMPLOYEE ON DEPARTMENT.DEPT_ID = EMPLOYEE.DEPT_ID
78
79 #OUT PUT Q-3 C
80 • SELECT EMP_ID, FIRST_NAME, LAST_NAME FROM EMPLOYEE WHERE (FLOOR(DATEDIFF(CURDATE(),DATE_OF_BIRTH) / 365)) >= 60;
81
82 # 3D
83 • SELECT DEPARTMENT.DEPT_ID,DEPARTMENT.DEPT_NAME, EMPLOYEE.FIRST_NAME FROM EMPLOYEE RIGHT JOIN DEPARTMENT ON EMPLOYEE.DEPT_ID = DEPARTMENT.DEPT_ID WHERE EMPLOYEE.DEPT_ID IS NULL;
84
```

5/83

Result Grid Filter Rows: Search Export

DEPT_ID	DEPT_NAME	FIRST_NAME
60	Finance	Mall
70	Quality Assurance	Mall

```

85      # 3E
86 •   SELECT EMPLOYEE.EMP_ID, EMPLOYEE.FIRST_NAME,JOBS.JOB_TITLE, EMPLOYEE.SALARY FROM EMPLOYEE
87     INNER JOIN JOBS ON EMPLOYEE.JOB_ID = JOBS.JOB_ID
88     INNER JOIN DEPARTMENT ON EMPLOYEE.DEPT_ID = DEPARTMENT.DEPT_ID
89     WHERE DEPARTMENT.DEPT_NAME = 'Research and Development';
90
91      #3F
92 •   UPDATE EMPLOYEE SET COMMISSION = 1 WHERE EXPERIENCE >= 10;
93
94
95

```

57:89

**Result Grid** Filter Rows: Search Export:

EMP_ID	FIRST_NAME	JOB_TITLE	SALARY
100	Neena	Officer	50000
101	Lex	Officer	50000
102	Alexander	Officer	50000
106	Diana	Officer	60000

Result 54

Action Output

Time	Action
115 17:36:14	SELECT EMPLOYEE.EMP_ID, EMPLOYEE.FIRST_NAME,JOBS.JOB_TITLE, EMPLOYEE.SALARY FROM EMPLOYEE INNER JOIN JOBS ON EN

Query Completed

90

91 #3F

92 • UPDATE EMPLOYEE SET COMMISSION = 1 WHERE Experience >= 10;

93 • SELECT \* FROM EMPLOYEE;

94

24:93

**Result Grid** Filter Rows: Search Edit: Export/Import:

EMP_ID	FIRST_NAME	LAST_NAME	PH_NUMBER	DATE_OF_BIRTH	HIRE_DATE	JOB_ID	SALARY	Experience	COMMISION	MANAGER_ID	DEPT_ID
100	Neena	Kochhar	33333333	1975-01-04	1995-08-20	1001	50000	22	1	1002	20
101	Lex	De Haan	44444444	1982-05-10	2005-06-01	1001	50000	17	1	1002	20
102	Alexander	Hunold	55555555	1977-10-14	2007-04-01	1001	50000	15	1	1002	20
103	Bruce	Ernst	66666666	1967-03-07	1990-07-01	1004	25000	32	1	1002	40
104	David	Austin	77777777	1986-03-02	2018-05-08	1005	15000	4	0	1002	50
105	Valli	Pataballa	88888888	1990-02-17	2015-07-10	1003	40000	7	0	1003	30
106	Diana	Lorentz	11111111	1996-02-20	2021-12-01	1001	60000	1	0	1002	20
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

EMPLOYEE 55

Action Output

Time	Action
120 17:41:54	SELECT * FROM EMPLOYEE LIMIT 0, 1000

Query Completed