



Databases with MySQL

Exercises (5) *SQL- Simple Querys* (*Solutions*)

By Cristina Rodrigues



Use the database that was provided to solve the following queries.

1) Show all the information in the table SALGRADE.

	GRADE	LOSAL	HIS
▶	1	700.00	120
	2	1201.00	140
	3	1401.00	200
	4	2001.00	300
	5	3001.00	400

```
SELECT * FROM SALGRADE;
```

2) Show all the information in the table EMP.

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
▶	7369	SMITH	CLERK	7902	2022-12-17	800.00	NULL
	7499	ALLEN	SALESMAN	7698	2023-02-20	1600.00	300
	7521	WARD	SALESMAN	7698	2023-02-22	1250.00	500
	7566	JONES	MANAGER	7839	2023-04-02	2975.00	NULL
	7654	MARTIN	SALESMAN	7698	2023-09-28	1250.00	140
	7698	BLAKE	MANAGER	7839	2023-05-01	2850.00	NULL
	7782	CLARK	MANAGER	7839	2023-06-09	2450.00	NULL
	7788	SCOTT	ANALYST	7566	2025-04-19	3000.00	NULL
	7839	KING	PRESIDENT	NULL	2023-11-17	5000.00	NULL
	7844	TURNER	SALESMAN	7698	2023-09-08	1500.00	0.0
	7876	ADAMS	CLERK	7788	2025-05-23	1100.00	NULL
	7900	JAMES	CLERK	7698	2022-12-03	950.00	NULL

```
SELECT * FROM EMP;
```



- 3) List all the employees that have a salary between 500 and 1500.

	ENAME	DEPTNO	SAL
▶	SMITH	20	800
	WARD	30	125
	MARTIN	30	125
	TURNER	30	150
	ADAMS	20	110
	JAMES	30	950

```
SELECT ENAME, DEPTNO, SAL FROM EMP WHERE SAL BETWEEN 500 AND 1500;
```

- 4) List the number and the name of the departments ordered by department name.

	DEPTNO	DNAME
▶	10	ACCOUNTING
	40	OPERATIONS
	20	RESEARCH
	30	SALES

```
SELECT DEPTNO, DNAME FROM DEPT ORDER BY DNAME;
```

- 5) Show all the different jobs.

	JOB
▶	CLERK
	SALESMAN
	MANAGER
	ANALYST

```
SELECT DISTINCT JOB FROM EMP;
```



- 6) List all the information for the employees in departments 10 and 20 ordered by employee name.

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COM
▶	7876	ADAMS	CLERK	7788	2025-05-23	1100.00	NUL
	7782	CLARK	MANAGER	7839	2023-06-09	2450.00	NUL
	7902	FORD	ANALYST	7566	2023-12-03	3000.00	NUL
	7566	JONES	MANAGER	7839	2023-04-02	2975.00	NUL
	7839	KING	PRESIDENT	NULL	2023-11-17	5000.00	NUL
	7934	MILLER	CLERK	7782	2024-01-23	1300.00	NUL
	7788	SCOTT	ANALYST	7566	2025-04-19	3000.00	NUL

```
SELECT * FROM EMP WHERE DEPTNO=10 OR DEPTNO=20 ORDER BY ENAME;
```

- 7) List the names and jobs of the employees in department 20.

	ENAME	JOB
▶	SMITH	CLERK
	ADAMS	CLERK

```
SELECT ENAME, JOB FROM EMP WHERE JOB="CLERK" AND DEPTNO=20;
```

- 8) List the names of the employees that contain the strings 'ER' or 'AM'.

	ENAME
▶	TURNER
	ADAMS
	JAMES
	MILLER

```
SELECT ENAME FROM EMP WHERE ENAME LIKE '%ER%' OR ENAME LIKE '%AM%';
```



9) List the following information for the employees that have a manager (MGR).

	ENAME	JOB	SAL
▶	SMITH	CLERK	800.00
	ALLEN	SALESMAN	1600.00
	WARD	SALESMAN	1250.00
	JONES	MANAGER	2975.00
	MARTIN	SALESMAN	1250.00
	BLAKE	MANAGER	2850.00
	CLARK	MANAGER	2450.00
	SCOTT	ANALYST	3000.00
	TURNER	SALESMAN	1500.00
	ADAMS	CLERK	1100.00
	JAMES	CLERK	950.00

```
SELECT ENAME, JOB, SAL FROM EMP WHERE MGR IS NOT NULL;
```

10) List the name and total annual salary of the employees.

	ENAME	TOTAL SALARY	COMMIS
▶	SMITH	9600.00	NULL
	ALLEN	19200.00	300.00
	WARD	15000.00	500.00
	JONES	35700.00	NULL
	MARTIN	15000.00	1400.00
	BLAKE	34200.00	NULL
	CLARK	29400.00	NULL
	SCOTT	36000.00	NULL
	KING	60000.00	NULL
	TURNER	18000.00	0.00
	ADAMS	13200.00	NULL
	JAMES	11400.00	NULL

```
SELECT ENAME, SAL*12 "TOTAL SALARY", COMM "COMMISSIONS" FROM EMP;
```



- 11) List the name and annual salary and commissions of the employees that are SALESMAN and monthly salary is greater than the commission. Order by salary (descending order) and by employee name if the salaries are equal..

	ENAME	ANNUAL SALARY	COMM
▶	ALLEN	19200.00	300.00
	TURNER	18000.00	0.00
	WARD	15000.00	500.00

```
SELECT ENAME, SAL*12 "ANNUAL SALARY", COMM "COMMISSIONS" FROM  
EMP WHERE JOB="SALESMAN" AND SAL>COMM ORDER BY SAL DESC  
, ENAME;
```