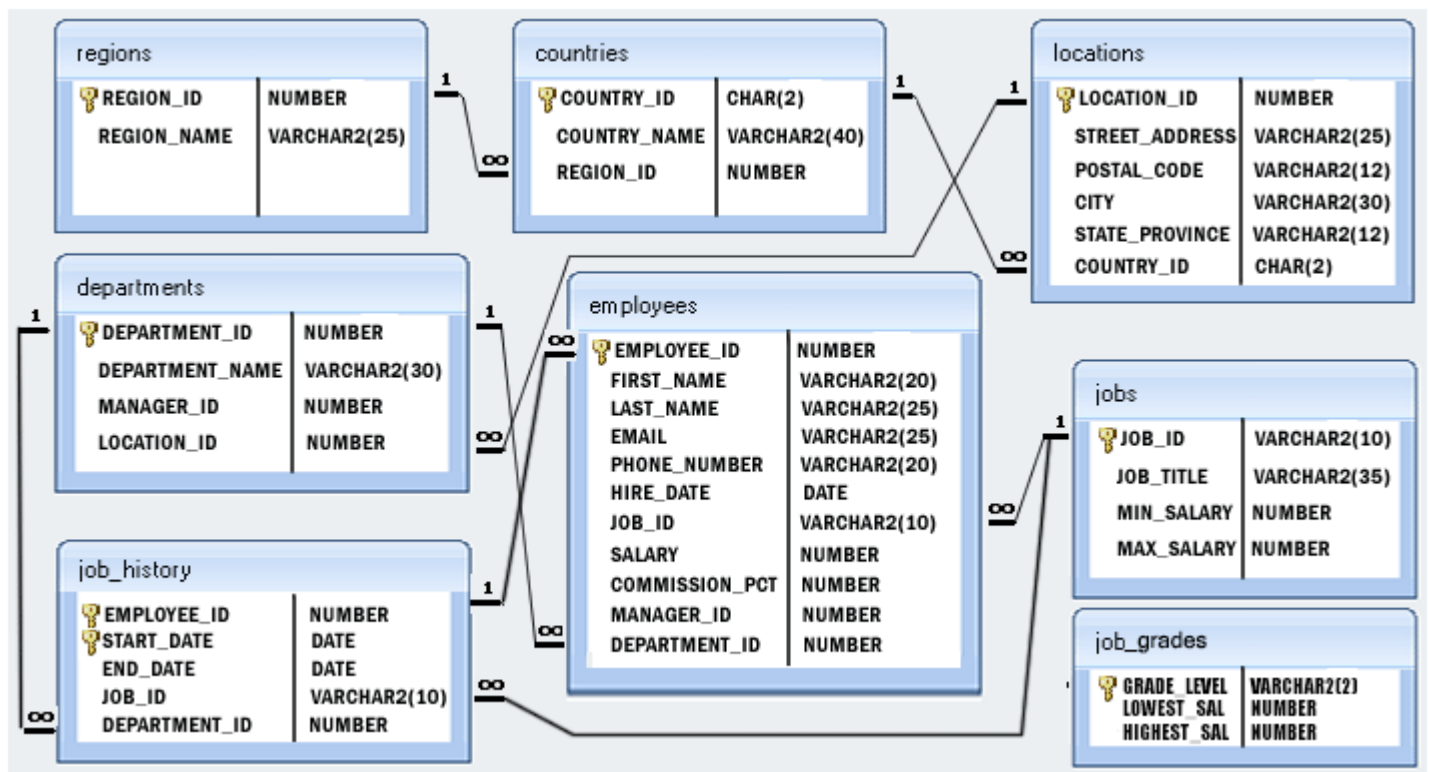


UPDATE Statement Examples



The Human Resources (HR) Database

This sample database consists of 8 tables, as depicted in the following Entity-Relationship (ER) Diagram.



Run the SQL Scripts

Before we proceed any further, please go ahead and import the SQL Script ([click here](https://bryanuniversity.instructure.com/courses/10152/files/744673/download?wrap=1) <https://bryanuniversity.instructure.com/courses/10152/files/744673/download?wrap=1>) to download the script file) into MySQL Work Bench and/or PostgreSQL applications.



Update Statements

```
mysql> SELECT * FROM employees LIMIT 2;
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT
100	Steven	King	not available	515.123.4567	1987-06-17	AD_PRES	24000.00	
101	Neena	Kochhar	not available	515.123.4568	1987-06-18	AD_VP	17000.00	

2 rows in set (0.00 sec)

- Write a SQL statement to change the email and commission_pct column of employees table with 'not available' and 0.10 for those employees whose department_id is 110.

```
UPDATE employees
SET email='not available',
    commission_pct=0.10
WHERE department_id=110;
```

Sample Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT
205	Shelley	Higgins	not available	515.123.8080	1987-09-30	AC_MGR	12000.00	
206	William	Gietz	not available	515.123.8181	1987-10-01	AC_ACCOUNT	8300.00	

2 rows in set (0.00 sec)

- Write a SQL statement to change the email column of employees table with 'not available' for those employees whose department_id is 80 and gets a commission is less than .20%.

```
UPDATE employees
SET email='not available'
WHERE department_id=80 AND commission_pct<.20;
```

Sample Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT
155	Oliver	Tuvault	not available	011.44.1344.486508	1987-08-11	SA_REP	7000.00	
163	Danielle	Greene	not available	011.44.1346.229268	1987-08-19	SA_REP	9500.00	
164	Mattea	Marvins	not available	011.44.1346.329268	1987-08-20	SA_REP	7200.00	
165	David	Lee	not available	011.44.1346.529268	1987-08-21	SA_REP	6800.00	
166	Sundar	Ande	not available	011.44.1346.629268	1987-08-22	SA_REP	6400.00	
167	Amit	Banda	not available	011.44.1346.729268	1987-08-23	SA_REP	6200.00	
171	William	Smith	not available	011.44.1343.629268	1987-08-27	SA_REP	7400.00	
172	Elizabeth	Bates	not available	011.44.1343.529268	1987-08-28	SA_REP	7300.00	
173	Sundita	Kumar	not available	011.44.1343.329268	1987-08-29	SA_REP	6100.00	
179	Charles	Johnson	not available	011.44.1644.429262	1987-09-04	SA_REP	6200.00	

- Write a SQL statement to change the email column of employees table with 'not available' for those employees who belongs to the 'Accounting' department.

```
UPDATE employees
SET email='not available'
WHERE department_id=(
SELECT department_id
```

```
FROM departments
WHERE department_name='Accounting');
```

Sample Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION
205	Shelley	Higgins	not available	515.123.8080	1987-09-30	AC_MGR	12000.00	
206	William	Gietz	not available	515.123.8181	1987-10-01	AC_ACCOUNT	8300.00	

- Write a SQL statement to change salary of employee to 8000 whose ID is 105, if the existing salary is less than 5000.

```
UPDATE employees SET SALARY = 8000 WHERE employee_id = 105 AND salary < 5000;
```

Sample Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION
105	David	Austin	DAUSTIN	590.423.4569	1987-06-22	IT_PROG	8000.00	

- Write a SQL statement to change job ID of employee which ID is 118, to SH_CLERK if the employee belongs to department, which ID is 30 and the existing job ID does not start with SH.

```
UPDATE employees SET JOB_ID= 'SH_CLERK'
WHERE employee_id=118
AND department_id=30
AND NOT JOB_ID LIKE 'SH%';
```

Sample Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION
118	Guy	Himuro	GHIMURO	515.127.4565	1987-07-05	SH_CLERK	2600.00	

- Write a SQL statement to increase the salary of employees under the department 40, 90 and 110 according to the company rules that, salary will be increased by 25% for the department 40, 15% for department 90 and 10% for the department 110 and the rest of the departments will remain same.

```
UPDATE employees
SET salary = CASE department_id
                WHEN 40 THEN salary+(salary*.25)
                WHEN 90 THEN salary+(salary*.15)
                WHEN 110 THEN salary+(salary*.10)
                ELSE salary
```

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with the 'employees' table selected. The main editor shows a series of SQL queries for updating the 'employees' table. The 'Output' tab at the bottom shows the execution results of these queries.

SQL Queries:

```

1  USE hr;
2
3  -- 1. Write a SQL statement to change the value of email column within employees table to 'not available' for employee whose ID is 206.
4  UPDATE employees SET email = 'not available' WHERE employee_id = 206;
5
6  -- 2. Write a SQL statement to change job ID of employee whose ID is 118, to SH_CLERK if the employee belongs to department with an ID of 30 and the existing job ID does not start with SH.
7  UPDATE employees SET job_id = 'SH_CLERK' WHERE employee_id = 118 AND department_id = 30 AND NOT job_id LIKE 'SH%';
8
9  -- 3. Write a SQL statement to change the value of email column within employees table to 'not available' for those employees who belong to the 'Accounting' department.
10 UPDATE employees SET email = 'N/A' WHERE department_id = (SELECT department_id FROM departments WHERE department_name = 'Accounting');
11
12 -- 4. Write a SQL statement to increase the salary of employees working in the departments 40, 90 and 110. According to the company rules, salary will be increased by 25% for the department 40, 15% for department 90
13 -- and 10% for the department 110 and the rest of the departments will remain same (no increase).
14
15 -- 5. Write a SQL statement to increase the minimum and maximum salary of PU_CLERK by 2,000 as well as the salary for those employees by 20% in addition to a commission percent of .10.

```

Execution Results (Action Output):

#	Time	Action	Message	Duration / Fetch
2	17:38:33	SELECT * FROM employees	107 row(s) returned	0.000 sec / 0.000 sec
3	17:38:50	UPDATE employees SET email = 'not available' WHERE employee_id = 206	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec
4	17:38:54	SELECT * FROM employees	107 row(s) returned	0.000 sec / 0.000 sec
5	17:41:29	UPDATE employees SET job_id = 'SH_CLERK' WHERE employee_id = 118 AND department_id = 30 AND NOT job_id LIKE 'SH%'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec
6	17:41:35	SELECT * FROM employees	107 row(s) returned	0.000 sec / 0.000 sec

- Write a SQL statement to change the email column of employees table with 'not available' for all employees.

```
UPDATE employees SET email='not available';
```

Sample Output:

```

mysql> SELECT * FROM employees LIMIT 2;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| EMPLOYEE_ID | FIRST_NAME | LAST_NAME | EMAIL | PHONE_NUMBER | HIRE_DATE | JOB_ID | SALARY | COMMISSION_PCT |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 100 | Steven | King | not available | 515.123.4567 | 1987-06-17 | AD_PRES | 24000.00 | 0.10 |
| 101 | Neena | Kochhar | not available | 515.123.4568 | 1987-06-18 | AD_VP | 17000.00 | 0.10 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

```

- Write a SQL statement to change the email and commission_pct column of employees table with 'not available' and 0.10 for all employees.

```
UPDATE employees SET email='not available', commission_pct=0.10;
```

Sample Output:

```

END
WHERE department_id IN (40,50,50,60,70,80,90,110);

```

Sample Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION
100	Steven	King	SKING	515.123.4567	1987-06-17	AD_PRES	24000.00	
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1987-06-18	AD_VP	17000.00	
102	Lex	De Haan	LDEHAAN	515.123.4569	1987-06-19	AD_VP	17000.00	
203	Susan	Mavris	SMAVRIS	515.123.7777	1987-09-28	HR_REP	6500.00	
205	Shelley	Higgins	SHIGGINS	515.123.8080	1987-09-30	AC_MGR	12000.00	
206	William	Gietz	WGIETZ	515.123.8181	1987-10-01	AC_ACCOUNT	8300.00	

- Write a SQL statement to increase the minimum and maximum salary of PU_CLERK by 2000 as well as the salary for those employees by 20% and commission percent by .10.

```

UPDATE jobs, employees
SET jobs.min_salary = jobs.min_salary+2000,
    jobs.max_salary = jobs.max_salary+2000,
    employees.salary = employees.salary + (employees.salary * 0.20),
    employees.commission_pct = employees.commission_pct+.10
WHERE jobs.job_id='PU_CLERK'
AND employees.job_id='PU_CLERK';

```

Results before update:

table - jobs				
JOB_ID	JOB_TITLE	MIN_SALARY	MAX_SALARY	
PU_CLERK	Purchasing Clerk	2500	5500	

table - employees									
EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION	
115	Alexander	Khoo	AKHOO	515.127.4562	1987-07-02	PU_CLERK	3100.00		
116	Shelli	Baida	SBAIDA	515.127.4563	1987-07-03	PU_CLERK	2900.00		
117	Sigal	Tobias	STOBIAS	515.127.4564	1987-07-04	PU_CLERK	2800.00		
118	Guy	Himuro	GHIMURO	515.127.4565	1987-07-05	PU_CLERK	2600.00		
119	Karen	Colmenares	KCOLMENA	515.127.4566	1987-07-06	PU_CLERK	2500.00		

Results before update:

table - jobs

JOB_ID	JOB_TITLE	MIN_SALARY	MAX_SALARY
PU_CLERK	Purchasing Clerk	4500	7500

table - employees

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION
115	Alexander	Khoo	AKHOO	515.127.4562	1987-07-02	PU_CLERK	3720.00	
116	Shelli	Baida	SBAIDA	515.127.4563	1987-07-03	PU_CLERK	3480.00	
117	Sigal	Tobias	STOBIAS	515.127.4564	1987-07-04	PU_CLERK	3360.00	
118	Guy	Himuro	GHIMURO	515.127.4565	1987-07-05	PU_CLERK	3120.00	
119	Karen	Colmenares	KCOLMENA	515.127.4566	1987-07-06	PU_CLERK	3000.00	