Queries

- Create and Use a database named information.

```
mysql> create database information;
Query OK, 1 row affected (0.01 sec)

mysql> use information;
Database changed
```

- Create a table named employees and insert values.

```
mysql> create table employees (employee_id INT PRIMARY KEY AUTO_INCREMENT,name VARCHAR(50),department VARCHAR(50),salary INT,status VA
RCHAR(50),hire_date DATE);
Query OK, 0 rows affected (0.06 sec)

mysql> INSERT INTO employees (employee_id, name, department, salary, status, hire_date) VALUES
    -> (1, 'Alice', 'Sales', 40000, 'Active', '2021-05-12'),
    -> (2, 'Bob', 'IT', 50000, 'Active', '2020-08-01'),
    -> (3, 'Carol', 'HR', 45000, 'Active', '2022-01-20'),
    -> (4, 'Dave', 'Sales', 42000, 'Active', '2023-03-15'),
    -> (5, 'Eve', 'IT', 52000, 'Active', '2021-11-10');
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

- Show all employees.

```
mysql> select * from employees;
+-------------+-------+------------+--------+--------+------------+
| employee_id | name  | department | salary | status | hire_date  |
+-------------+-------+------------+--------+--------+------------+
|           1 | Alice | Sales      |  40000 | Active | 2021-05-12 |
|           2 | Bob   | IT         |  50000 | Active | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Active | 2022-01-20 |
|           4 | Dave  | Sales      |  42000 | Active | 2023-03-15 |
|           5 | Eve   | IT         |  52000 | Active | 2021-11-10 |
+-------------+-------+------------+--------+--------+------------+
5 rows in set (0.00 sec)
```

- Show only name and salary of employees.

```
mysql> select name, salary from employees;
+-------+--------+
| name  | salary |
+-------+--------+
| Alice |  40000 |
| Bob   |  50000 |
| Carol |  45000 |
| Dave  |  42000 |
| Eve   |  52000 |
+-------+--------+
5 rows in set (0.00 sec)
```

- Show employees whose salary are more than 50000.

```
mysql> select * from employees where salary>50000;
+-------------+------+------------+--------+--------+------------+
| employee_id | name | department | salary | status | hire_date  |
+-------------+------+------------+--------+--------+------------+
|           5 | Eve  | IT         |  52000 | Active | 2021-11-10 |
+-------------+------+------------+--------+--------+------------+
1 row in set (0.00 sec)
```

- Show employees in department 'IT'.

```
mysql> select * from  employees where department='IT';
+-------------+------+------------+--------+--------+------------+
| employee_id | name | department | salary | status | hire_date  |
+-------------+------+------------+--------+--------+------------+
|           2 | Bob  | IT         |  50000 | Active | 2020-08-01 |
|           5 | Eve  | IT         |  52000 | Active | 2021-11-10 |
+-------------+------+------------+--------+--------+------------+
2 rows in set (0.00 sec)
```

- Update Alice's salary to 45000.

```
mysql> update employees set salary=45000 where name='Alice';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+-------+------------+--------+--------+------------+
| employee_id | name  | department | salary | status | hire_date  |
+-------------+-------+------------+--------+--------+------------+
|           1 | Alice | Sales      |  45000 | Active | 2021-05-12 |
|           2 | Bob   | IT         |  50000 | Active | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Active | 2022-01-20 |
|           4 | Dave  | Sales      |  42000 | Active | 2023-03-15 |
|           5 | Eve   | IT         |  52000 | Active | 2021-11-10 |
+-------------+-------+------------+--------+--------+------------+
5 rows in set (0.00 sec)
```

- Change the status of employee_id 3 to 'Inactive'.

```
mysql> update employees set status='Inactive' where employee_id='3';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+-------+------------+--------+----------+------------+
| employee_id | name  | department | salary | status   | hire_date  |
+-------------+-------+------------+--------+----------+------------+
|           1 | Alice | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob   | IT         |  50000 | Active   | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Inactive | 2022-01-20 |
|           4 | Dave  | Sales      |  42000 | Active   | 2023-03-15 |
|           5 | Eve   | IT         |  52000 | Active   | 2021-11-10 |
+-------------+-------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Give a 10% raise to everyone in the IT department.

```
mysql> update employees set salary=1.10*salary where department='IT';
Query OK, 2 rows affected (0.01 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> select * from employees;
+-------------+-------+------------+--------+----------+------------+
| employee_id | name  | department | salary | status   | hire_date  |
+-------------+-------+------------+--------+----------+------------+
|           1 | Alice | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob   | IT         |  55000 | Active   | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Inactive | 2022-01-20 |
|           4 | Dave  | Sales      |  42000 | Active   | 2023-03-15 |
|           5 | Eve   | IT         |  57200 | Active   | 2021-11-10 |
+-------------+-------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Update the department of Bob to ‘HR’.

```
mysql> update employees set department='HR' where name='bob';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+-------+------------+--------+----------+------------+
| employee_id | name  | department | salary | status   | hire_date  |
+-------------+-------+------------+--------+----------+------------+
|           1 | Alice | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob   | HR         |  55000 | Active   | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Inactive | 2022-01-20 |
|           4 | Dave  | Sales      |  42000 | Active   | 2023-03-15 |
|           5 | Eve   | IT         |  57200 | Active   | 2021-11-10 |
+-------------+-------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Set the status of employees hired before 2021 to ‘Retired’.

```
mysql> update employees set status='Retired' where  hire_date<'2021-01-01';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+-------+------------+--------+----------+------------+
| employee_id | name  | department | salary | status   | hire_date  |
+-------------+-------+------------+--------+----------+------------+
|           1 | Alice | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob   | HR         |  55000 | Retired  | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Inactive | 2022-01-20 |
|           4 | Dave  | Sales      |  42000 | Active   | 2023-03-15 |
|           5 | Eve   | IT         |  57200 | Active   | 2021-11-10 |
+-------------+-------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Increase the salary by 5000 for employee_id 4.

```
mysql> update employees set salary=salary+5000 where employee_id='4';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+-------+------------+--------+----------+------------+
| employee_id | name  | department | salary | status   | hire_date  |
+-------------+-------+------------+--------+----------+------------+
|           1 | Alice | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob   | HR         |  55000 | Retired  | 2020-08-01 |
|           3 | Carol | HR         |  45000 | Inactive | 2022-01-20 |
|           4 | Dave  | Sales      |  47000 | Active   | 2023-03-15 |
|           5 | Eve   | IT         |  57200 | Active   | 2021-11-10 |
+-------------+-------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Update the name of employee_id 5 to ‘Evelyn’.

```
mysql> update employees set name='Evelyn' where employee_id='5';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+--------+------------+--------+----------+------------+
| employee_id | name   | department | salary | status   | hire_date  |
+-------------+--------+------------+--------+----------+------------+
|           1 | Alice  | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob    | HR         |  55000 | Retired  | 2020-08-01 |
|           3 | Carol  | HR         |  45000 | Inactive | 2022-01-20 |
|           4 | Dave   | Sales      |  47000 | Active   | 2023-03-15 |
|           5 | Evelyn | IT         |  57200 | Active   | 2021-11-10 |
+-------------+--------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Set salary to 0 for employees with status ‘Inactive’.

```
mysql> UPDATE employees SET salary = 0 WHERE status = 'Inactive';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employees;
+-------------+--------+------------+--------+----------+------------+
| employee_id | name   | department | salary | status   | hire_date  |
+-------------+--------+------------+--------+----------+------------+
|           1 | Alice  | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob    | HR         |  55000 | Retired  | 2020-08-01 |
|           3 | Carol  | HR         |      0 | Inactive | 2022-01-20 |
|           4 | Dave   | Sales      |  47000 | Active   | 2023-03-15 |
|           5 | Evelyn | IT         |  57200 | Active   | 2021-11-10 |
+-------------+--------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Update the department to ‘Management’ for all employees in HR.

```
mysql> update employees set department='Management' where department='HR';
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> select * from employees;
+-------------+--------+------------+--------+----------+------------+
| employee_id | name   | department | salary | status   | hire_date  |
+-------------+--------+------------+--------+----------+------------+
|           1 | Alice  | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob    | Management |  55000 | Retired  | 2020-08-01 |
|           3 | Carol  | Management |      0 | Inactive | 2022-01-20 |
|           4 | Dave   | Sales      |  47000 | Active   | 2023-03-15 |
|           5 | Evelyn | IT         |  57200 | Active   | 2021-11-10 |
+-------------+--------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Increase salary by 2000 for employees with even employee_id.

```
mysql> update employees set salary=salary+2000 where employee_id%2=0;
Query OK, 2 rows affected (0.01 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> select * from employees;
+-------------+--------+------------+--------+----------+------------+
| employee_id | name   | department | salary | status   | hire_date  |
+-------------+--------+------------+--------+----------+------------+
|           1 | Alice  | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob    | Management |  57000 | Retired  | 2020-08-01 |
|           3 | Carol  | Management |      0 | Inactive | 2022-01-20 |
|           4 | Dave   | Sales      |  49000 | Active   | 2023-03-15 |
|           5 | Evelyn | IT         |  57200 | Active   | 2021-11-10 |
+-------------+--------+------------+--------+----------+------------+
5 rows in set (0.00 sec)
```

- Delete the employee whose name is Dave.

```
mysql> DELETE FROM employees WHERE name = 'Dave';
Query OK, 1 row affected (0.01 sec)

mysql> select * from employees;
+-------------+--------+------------+--------+----------+------------+
| employee_id | name   | department | salary | status   | hire_date  |
+-------------+--------+------------+--------+----------+------------+
|           1 | Alice  | Sales      |  45000 | Active   | 2021-05-12 |
|           2 | Bob    | Management |  57000 | Retired  | 2020-08-01 |
|           3 | Carol  | Management |      0 | Inactive | 2022-01-20 |
|           5 | Evelyn | IT         |  57200 | Active   | 2021-11-10 |
+-------------+--------+------------+--------+----------+------------+
4 rows in set (0.00 sec)
```

- Delete all employees in the Sales department.

```
mysql> DELETE FROM employees WHERE department = 'Sales';
Query OK, 1 row affected (0.01 sec)

mysql> select * from employees;
+-------------+--------+------------+--------+----------+------------+
| employee_id | name   | department | salary | status   | hire_date  |
+-------------+--------+------------+--------+----------+------------+
|           2 | Bob    | Management |  57000 | Retired  | 2020-08-01 |
|           3 | Carol  | Management |      0 | Inactive | 2022-01-20 |
|           5 | Evelyn | IT         |  57200 | Active   | 2021-11-10 |
+-------------+--------+------------+--------+----------+------------+
3 rows in set (0.00 sec)
```

- Delete employees whose salary is less than 42000.

```
mysql> DELETE FROM employees WHERE salary < 42000;
Query OK, 1 row affected (0.01 sec)

mysql> select * from employees;
+-------------+--------+------------+--------+---------+------------+
| employee_id | name   | department | salary | status  | hire_date  |
+-------------+--------+------------+--------+---------+------------+
|           2 | Bob    | Management |  57000 | Retired | 2020-08-01 |
|           5 | Evelyn | IT         |  57200 | Active  | 2021-11-10 |
+-------------+--------+------------+--------+---------+------------+
2 rows in set (0.00 sec)
```

- Delete employees hired after 2022-01-01.

```
mysql> DELETE FROM employees WHERE hire_date > '2022-01-01';
Query OK, 0 rows affected (0.00 sec)

mysql> select * from employees;
+-------------+--------+------------+--------+---------+------------+
| employee_id | name   | department | salary | status  | hire_date  |
+-------------+--------+------------+--------+---------+------------+
|           2 | Bob    | Management |  57000 | Retired | 2020-08-01 |
|           5 | Evelyn | IT         |  57200 | Active  | 2021-11-10 |
+-------------+--------+------------+--------+---------+------------+
2 rows in set (0.00 sec)
```

- Delete all employees whose status is ‘Retired’.

```
mysql> DELETE FROM employees WHERE status = 'Retired';
Query OK, 1 row affected (0.01 sec)

mysql> select * from employees;
+-------------+--------+------------+--------+--------+------------+
| employee_id | name   | department | salary | status | hire_date  |
+-------------+--------+------------+--------+--------+------------+
|           5 | Evelyn | IT         |  57200 | Active | 2021-11-10 |
+-------------+--------+------------+--------+--------+------------+
1 row in set (0.00 sec)
```