

Single-Row Functions: Flow Control

- Show the name of each doctor, replacing the title “MD” with “Dr.”

```
SELECT d_id,  
       REPLACE(d_title, 'MD', 'Dr.'),  
       d_firstname, d_lastname, specialty  
FROM Doctor;
```

- Show the name of each doctor, replacing the titles “MD” and “DO” with “Dr.”

```
SELECT d_id,  
       REPLACE(  
         REPLACE(d_title, 'MD', 'Dr.'),  
         'DO', 'Dr.'),  
       d_firstname, d_lastname, specialty  
FROM Doctor;
```

Single-Row Functions - Dates

- Show the doctor, date, and patient for all appointments at 10am
`SELECT d.d_lastname, DATE(a.a_date), TIME(a.a_date), p.p_lastname
FROM Doctor d
JOIN Appointment a ON d.d_id = a.d_id
JOIN Patient p ON a.p_id = p.p_id
WHERE TIME(a.a_date) = '10:00:00';`
- You can also use DATE_FORMAT!
`SELECT d.d_lastname, DATE_FORMAT(a.a_date, '%m/%d/%y'), DATE_FORMAT(a.a_date, '%h
%p'), p.p_lastname
FROM Doctor d
JOIN Appointment a ON d.d_id = a.d_id
JOIN Patient p ON a.p_id = p.p_id
WHERE DATE_FORMAT(a.a_date, '%h %p') = '10 am';`

Single-Row Functions - Dates

- Show the appointments for patients who were born in February and who are at least 30 years old

```
SELECT * FROM Patient p
JOIN Appointment a ON p.p_id = a.p_id
JOIN Doctor d ON a.d_id = d.d_id
WHERE MONTHNAME(p.bdate) = 'February'
AND YEAR(p.bdate) >= 1985;
```

Single-Row Functions

- Math functions return a single numeric value, based on an input

Standard SQL	SQLite Equivalent
ROUND(<i>number</i> , [<i>decimal places</i>])	Same as Standard
MOD(<i>number1</i> , <i>number2</i>)	Same as Standard
CEILING(<i>number</i>), FLOOR(<i>number</i>)	Round(num+0.5, 0) Round(num-0.5, 0
ABS(<i>number</i>)	Same as Standard
SIGN(<i>number</i>)	Same as Standard

More info on standard SQL: <https://dev.mysql.com/doc/refman/8.0/en/mathematical-functions.html>

More Info on SQLite: https://www.sqlite.org/lang_mathfunc.html