SQLite3 - Read (SELECT) Queries Cheat Sheet

# Sample Users Table

Hum ek `users` table use karenge jisme sample data hai (10 rows):  
  
id | name | age | address  
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1 | Ali | 22 | Lahore  
2 | Sara | 20 | Karachi  
3 | Hamza | 25 | Islamabad  
4 | Raza | 30 | Multan  
5 | Hassan | 19 | Quetta  
6 | Fatima | 27 | Peshawar  
7 | Usman | 23 | Rawalpindi  
8 | Zain | 21 | Hyderabad  
9 | Ayesha | 24 | Sialkot  
10 | Nadia | 26 | Faisalabad

# 12 Ways to Read Data in SQLite3

## 1. Sab data read karna

SELECT \* FROM users;

## 2. Specific columns read karna

SELECT name, age FROM users;

## 3. Filtering (WHERE)

SELECT \* FROM users WHERE age > 22;  
SELECT \* FROM users WHERE name = 'Ali';

## 4. Sorting (ORDER BY)

SELECT \* FROM users ORDER BY age ASC;  
SELECT \* FROM users ORDER BY age DESC;

## 5. Limited rows (LIMIT)

SELECT \* FROM users LIMIT 3;

## 6. Unique values (DISTINCT)

SELECT DISTINCT age FROM users;

## 7. Pattern search (LIKE)

SELECT \* FROM users WHERE name LIKE 'A%';  
SELECT \* FROM users WHERE address LIKE '%pur';

## 8. Multiple conditions (AND / OR)

SELECT \* FROM users WHERE age > 20 AND address = 'Lahore';  
SELECT \* FROM users WHERE age < 20 OR age > 25;

## 9. Range search (BETWEEN)

SELECT \* FROM users WHERE age BETWEEN 20 AND 25;

## 10. Specific set (IN)

SELECT \* FROM users WHERE name IN ('Ali', 'Sara', 'Hamza');

## 11. Aggregation functions

SELECT COUNT(\*) FROM users;  
SELECT MAX(age) FROM users;  
SELECT MIN(age) FROM users;  
SELECT AVG(age) FROM users;  
SELECT SUM(age) FROM users;

## 12. Grouping (GROUP BY + HAVING)

SELECT age, COUNT(\*) FROM users GROUP BY age HAVING COUNT(\*) > 1;