

SQLite Basics Guide

1. What is SQLite?

- SQLite is a lightweight, embedded SQL database engine.
- No separate server required.
- Database is stored as a single .db file.

2. Connecting to SQLite:

```
import sqlite3

conn = sqlite3.connect('example.db')

cursor = conn.cursor()
```

3. Creating a Table:

```
cursor.execute("""

    CREATE TABLE IF NOT EXISTS users (

        id INTEGER PRIMARY KEY AUTOINCREMENT,

        name TEXT NOT NULL,

        phone TEXT NOT NULL

    )

""")

conn.commit()
```

4. Inserting Data:

```
cursor.execute("INSERT INTO users (name, phone) VALUES (?, ?)", ("Alice", "0123456789"))

conn.commit()
```

5. Fetching Data:

```
cursor.execute("SELECT * FROM users")
```

```
rows = cursor.fetchall()
```

```
for row in rows:
```

```
    print(row)
```

6. Updating Data:

```
cursor.execute("UPDATE users SET phone=? WHERE name=?", ("01987654321", "Alice"))
```

```
conn.commit()
```

7. Deleting Data:

```
cursor.execute("DELETE FROM users WHERE name=?", ("Alice",))
```

```
conn.commit()
```

8. Closing Connection:

```
conn.close()
```