DBMS organization

PMOS SQL objects hierarchy:

(computer) – can have ≥ 1 DBMS installations, for example different versions of PostgreSQL

└ DBMS server – a DBMS installation; aka cluster; (O: ≡ database, i.e. has only 1 database)

└ database – aka catalog; (M: ≡ schema);
described by the INFORMATION_SCHEMA (not in Oracle)

└ schema – a namespace containing tables/views, functions/procedures, triggers, etc.;
(O: identical to user; user = schema owner)
(S: by default "dbo" schema is used)
(P: by default "public" schema is used)

So, to identify any object in a DBMS server, you need: (PS: database name + schema name + object name)
(M: database name + object name)
(O: schema name + object name)

A user which has connected to a DBMS can:

(P: use (and also own) objects in all allowed schemas)
(O: use (but cannot own - schema works as owner) objects in all allowed schemas)
(M: use (but cannot own - no concept of ownership) objects in all allowed databases)
(S: use (and also own) objects in all allowed databases and schemas)

SQLite is serverless i.e. there is no separate server process that manages the DB; an application interacts with the database engine using function calls, not by sending messages to a separate process or thread.