

Q.1 Explain the difference between local storage options (shared_preferences, SQLite, Hive).

Ans=>**SharedPreferences** → For **small key-value pairs** (like login info, settings). Easy & lightweight.

SQLite → For **structured relational data** (tables, queries, relationships). Best for complex storage.

Hive → For **NoSQL fast key-value storage**, works offline, good for medium-large unstructured data.

Q.2 Describe CRUD operations and how they are implemented in SQLite or Hive.

Ans=>**SQLite** (relational DB)

- **Create** → INSERT INTO table (...) VALUES (...)
- **Read** → SELECT * FROM table WHERE ...
- **Update** → UPDATE table SET column=value WHERE id=...
- **Delete** → DELETE FROM table WHERE id=...

Hive (NoSQL, key-value)

- **Create** → box.put(key, value)
- **Read** → box.get(key)
- **Update** → box.put(key, newValue) (same as create)
- **Delete** → box.delete(key)

Q.3 . Explain the advantages and use cases for shared_preferences.

Ans=>**Advantages of shared_preferences**

- Very **lightweight** and easy to use.
- Stores data **persistently** (remains after app restart).
- Good for **key-value pairs**.

- No need for database setup.

Use Cases

- Saving **login/session info** (email, token).
- Storing **user settings** (theme, language, notifications).
- Keeping **simple app state** (first-time launch flag, remember me).