



### Assignment - 03

myCOMPANION 43304

\* Title → Android database connectivity.

\* Problem Statement → Create an SQLite application for the Android application and perform CRUD operations.

\* Theory →

A. What is SQLite?

SQLite is an SQL database. The data is stored in the form of tables. The tables are the structure for storing data consisting of rows and columns.

B. Android SQLite :

- ① Lightweight database which comes with android. It combines a clean SQL database with a very small memory footprint.
- ② SQLite is a typical relational database.

C. Android SQLite SQLite Helper :

- ① Android has features available to handle changing database schemas which mostly depends on using the SQLiteOpenHelper class.
- ② SQLiteOpenHelper is designed to get rid of 2 common problems →  
i) No database is present, when the application is run 1<sup>st</sup> time  
ii) Designed to create and upgrade a database as per specifications.

```
public DataBaseHelper (Context context) {  
    super (context, DB-NAME, null, DB-VERSION);  
}
```

D. Opening and closing Android SQLite database connection :

- ① Before performing any database operations, open the database connectivity by calling getWritableDatabase () method.
- ② The dbHelper is an instance of the subclass of SQLiteOpenHelper.





③ To close the database connection, following method is invoked.

```
public void close() {  
    db.Helper.close();  
}
```

E. Android SQLite Cursor:

① A cursor represents the entire result set of the query. Once the query is fetched a call to `cursor.moveToFirst()` is made.

② Calling `moveToFirst()` does 2 things →

i) Test whether query returned an empty set.

ii) Moves cursor to first result.

\* Conclusion → Thus in this assignment, we've learnt about SQLite and how to perform CRUD operations.