DATABASE

a. What is the use of SQlite open helper class in SQlite?

SQlite open helper class is a helper class to manage database creation and version management.

SQLiteOpenHelper takes care of all database management activities.

Extend your class from SQLiteOpenHelper you need to override two methods

onCreate() and onUpgrage()

onCreate() - These is where we need to write create table statements. This is called when database is created.

```
@override
public void onCreate(SQLitedatabase db){
String CREATE_CONTACTS_TABLE =  "CREATE TABLE "+TABLE_CONTACTS+" ("+KEY_ID+"INTEGER PRIMRY KEY,"+KEY_NAME + "TEXT,"+ KEY_PH_NO+"TEXT"+")";
//executes and create the table
db.execSQL(CREATE_CONTACTS_TABLE);
}
```

b. What is the use of OnUpgrade function in SQLiteOpenHelper class?

onUpgrade()-This method is called when database is upgraded like modifying the table structure, adding constraints to database etc.

```
@override
public void onUpgrade(SQLLiteDatabase db,int oldVersion,int
newVersion){
//Drop older table if existed
db.execSQL("DROP TABLE IF EXISTS"+ TABLE_CONTACTS);
//Create tables again
onCreate(db);
}
```

c. How to show sqlite database table information in android application. What is the best way to do it?

To read from a database, use the query() method, passing it your selection criteria and desired columns. The method combines elements of insert() and update(), except the column list defines the data you want to fetch, rather than the data to insert. The results of the query are returned to you in a Cursor object

Cursor is a collection of your query data.

- moveToFirst() is used to point the cursor position from where you want to get data from your cursor.
- There are methods - moveToLast(), moveToNext(), moveToPrevious(),moveToPosition(position) by which you can iterate through your cursor by desired way.

```
Public Contact getContact(int id){

SQLiteDatabase db = this.getReadableDatabase();

Cursor cursor db.query(TABLE_CONTACTS,new
String[]{KEY_ID,KEY_NAME,KEY_PH_NO},KEY_ID +"=",new
String[]{String.valueOf(id)},null,null,null,null);

If(cursor !=null)
```

```
Cursor.moveToFirst();

Contact contact = new
Contact(Integer.parseInt(cursor.getString(0)),

    Cursor.getString(1),cursor.getString(2));

Retun contact;

}
```