**SQLITE DATABASE**

1.create a dataBaseHelper class and extends SQLiteOpenHelper.(import class & implement methods & create constructor matching super)

2.create some variables DATABASE\_NAME,TABLE\_NAME.

3.Assign the column name of table.

4.put context,DATBASE\_NAME,null,1 in the constructor super.

5.write query inside oncreate method to create table using db.execSQL();

db.execSQL(**"create table "**+ ***TABLE\_NAME*** + **" (id INTEGER PRIMARY KEY AUTOINCREMENT,name TEXT ,surname TEXT,marks INTGER)"**);

6. write query inside onUpgrade to drop table if exits from before.

db.execSQL(**"DROP TABLE IF EXISTS "**+***TABLE\_NAME***);

And create database using onCreate();

7.Create instant of databasehelper class in the mainactivity.

DatabaseHelper **myDb** = **new** DatabaseHelper(**this**);

8.To check the database

**Step 1=>** must Run app in emulator

**Step 2=>** Tools >> Android >> Android Device Monitor

**Step 3=>** Select the app from left side

**Step 4=>** In the right side, data >> data >> select the app folder >> database folder

9.To Export the data

Select the database(student.db) and select “Pull a File from the device”(Right top corner).Save it in the computer.

10. To check the data from database

Install an add-ons in firefox named **SQLITE MANGER**.

Open the database (student.db) using **SQLITE MANAGER**.

**Inserting Data**

**1.Create InsertData() method.**

**Public Boolean insertData(String name,String surname,String marks){}**

**2. remove sqlite instants from constructor.**

SQLiteDatabase db = **this**.getWritableDatabase();

**And put it inside the insertData() method.**

**3.instants of ContentValue**

ContentValues contentValues = **new** ContentValues();

**4.Put the value of column using**

**contentValues.put(Column\_name,value);**

**insertData() method is**

**public boolean** insertData(String name,String surname,String marks){  
 SQLiteDatabase db = **this**.getWritableDatabase();  
  
 ContentValues contentValues = **new** ContentValues();  
  
 contentValues.put(***COL\_2***,name);  
 contentValues.put(***COL\_3***,surname);  
 contentValues.put(***COL\_4***,marks);  
 **long** result = db.insert(TABLE\_NAME,**null**,contentValues);  
  
 **if**(result == -1){  
 **return false**;  
 }**else**{  
 **return true**;  
 }  
}

**5.Then go to the mainactivity.initialize the editText and button.**

**6.onCLickListener of add button ,call the method insertData() using databasehelper instants.**

**7.To check database is inserted or not use a Boolean variable.**

**boolean** isInserted = **myDb**.insertData(**editTextName**.getText().toString(),  
 **editTextSurname**.getText().toString(),**editTextMarks**.getText().toString());  
**if**(isInserted){  
 Toast.*makeText*(MainActivity.**this**,**"Data inserted"**,Toast.***LENGTH\_SHORT***).show();  
}**else**{  
 Toast.*makeText*(MainActivity.**this**,**"Data did not insert"**,Toast.***LENGTH\_SHORT***).show();  
}

**Show Data**

**1.create a getData() method of Cursor class.**

**2.Put the instant of database class inside the class**

SQLiteDatabase db = **this**.getWritableDatabase();

3.Create an instants of Cursor class for query.

Cursor res = db.rawQuery(**"Select \* from "**+***TABLE\_NAME***,**null**);

**4.in the setOnCLickListener of viewAll button call the method using databasehelper instants.**

**5.save the method in res which is an instants of Cursor.**

**6.check if there is any data or not**

**if**(res.getCount()==0){  
 *//****Todo*** *//show message* **return**;  
}

7.Display data using stringbuffer.

StringBuffer buffer = **new** StringBuffer();

8.get data using res instants in while

**while** (res.moveToNext()){  
   
}

9.use buffer.append() to get data.

buffer.append(**"Id: "**+res.getString(0));

10.Create method of showmsg() to show data or errors.

**public void** showMsg(String title,String Message){  
 AlertDialog.Builder builder = **new** AlertDialog.Builder(**this**);  
 builder.setCancelable(**true**);  
 builder.setTitle(title);  
 builder.setMessage(Message);  
 builder.show();  
  
}

Update Data

1.Create updateData() method inside databasehelper class.

2.add instants of SQliteDatabase and contentValues.

3.as like as insertdata() method,put all the data inside the contentValues including id.

4.call update method using db instants.

db.update(***TABLE\_NAME***, contentValues ,**"id = ? "**,**new** String[]{id});

5.return true.

**6.as like as insert do in updata .**