**Student Database App**

Design an activity to allow the user add, find and delete the following data :

* Student ID
* Student name
* Age
* Result (eg Pass, Merit, Distinction)

**Student Class**

**public class** Student {  
  
 **private int \_id**;  
 **private** String **\_studentname**;  
 **private int \_age**;  
 **private** String **\_result**;  
  
 **public** Student() {  
 }  
 **public** Student(**int** id, String studentname, **int** age, String result) {  
 **this**.**\_id** = id;  
 **this**.**\_studentname** = studentname;  
 **this**.**\_age** = age;  
 **this**.**\_result** =result;  
 }  
 **public** Student(String studentname, **int** age, String result) {  
 **this**.**\_studentname** = studentname;  
 **this**.**\_age** = age;  
 **this**.**\_result** = result;  
 }  
 **public void** setID(**int** id) {  
 **this**.**\_id** = id;  
 }  
 **public int** getID() {  
 **return this**.**\_id**;  
 }  
 **public void** setStudentName(String studentname) {  
 **this**.**\_studentname** = studentname;  
 }  
 **public** String getStudentName() {  
 **return this**.**\_studentname**;  
 }  
 **public void** setAge(**int** age) {  
 **this**.**\_age** = age;  
 }  
 **public int** getAge() {  
 **return this**.**\_age**;  
 }  
  
 **public void** setResult(String result) {  
 **this**.**\_result** = result;  
 }  
 **public** String getResult() {  
 **return this**.**\_result**;  
 }  
  
}

**MySQLDb Class**

**package** com.raymundoconnor.studentdbapp;  
  
**import** android.content.ContentValues;  
**import** android.content.Context;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.database.sqlite.SQLiteOpenHelper;  
  
**public class** MySQLDb **extends** SQLiteOpenHelper {  
  
 *// when you type SQLiteOpenHelper as above you must import the onCreate, onUpgrade methods* **private static final int *DATABASE\_VERSION*** = 1;  
 **private static final** String ***DATABASE\_NAME*** = **"studentDB.db"**;  
 **private static final** String ***TABLE\_STUDENTS*** = **"students"**;  
  
 **public static final** String ***COLUMN\_ID*** = **"\_id"**;  
 **public static final** String ***COLUMN\_STUDENTNAME*** = **"studentname"**;  
 **public static final** String ***COLUMN\_Age*** = **"age"**;  
 **public static final** String ***COLUMN\_Result*** = **"result"**;  
  
 **public** MySQLDb(Context context, String name,  
 SQLiteDatabase.CursorFactory factory, **int** version) {  
 **super**(context, ***DATABASE\_NAME***, factory, ***DATABASE\_VERSION***);  
 }  
   
 @Override  
 **public void** onCreate(SQLiteDatabase db) {  
 String CREATE\_STUDENTS\_TABLE = **"CREATE TABLE "** +  
 ***TABLE\_STUDENTS*** + **"("** + ***COLUMN\_ID*** + **" INTEGER PRIMARY KEY,"** + ***COLUMN\_STUDENTNAME*** + **" TEXT,"** + ***COLUMN\_Age*** + **" INTEGER"** + ***COLUMN\_Result*** + **" ,TEXT"** + **")"**;  
 db.execSQL(CREATE\_STUDENTS\_TABLE);  
 }  
  
 @Override  
 **public void** onUpgrade(SQLiteDatabase db, **int** oldVersion, **int** newVersion) {  
 db.execSQL(**"DROP TABLE IF EXISTS "** + ***TABLE\_STUDENTS***);  
 onCreate(db);  
 }  
   
 **public void** addStudent(Student student) {  
 ContentValues values = **new** ContentValues();  
 values.put(***COLUMN\_STUDENTNAME***, student.getStudentName());  
 values.put(***COLUMN\_Age***, student.getAge());  
 values.put(***COLUMN\_Result***, student.getResult());  
 SQLiteDatabase db = **this**.getWritableDatabase();  
 db.insert(***TABLE\_STUDENTS***, **null**, values);  
 db.close();  
 }  
  
 **public** Student findStudent(String studentname) {  
 String query = **"Select \* FROM "** + ***TABLE\_STUDENTS*** + **" WHERE "** + ***COLUMN\_STUDENTNAME*** + **" = \""** + studentname + **"\""**;  
 SQLiteDatabase db = **this**.getWritableDatabase();  
 Cursor cursor = db.rawQuery(query, **null**);  
 Student product = **new** Student();  
 **if** (cursor.moveToFirst()) {  
 cursor.moveToFirst();  
 product.setID(Integer.*parseInt*(cursor.getString(0)));  
 product.setProductName(cursor.getString(1));  
 product.setQuantity(Integer.*parseInt*(cursor.getString(2)));  
 cursor.close();  
 } **else** {  
 product = **null**;  
 }  
 db.close();  
 **return** product;  
 }  
   
 **public boolean** deleteStudent(String studentname) {  
 **boolean** result = **false**;  
 String query = **"Select \* FROM "** + ***TABLE\_STUDENTS*** + **" WHERE "** + ***COLUMN\_STUDENTNAME*** + **" = \""** + studentname + **"\""**;  
 SQLiteDatabase db = **this**.getWritableDatabase();  
 Cursor cursor = db.rawQuery(query, **null**);  
 Student student = **new** Student();  
 **if** (cursor.moveToFirst()) {  
 student.setID(Integer.*parseInt*(cursor.getString(0)));  
 db.delete(***TABLE\_STUDENTS***, ***COLUMN\_ID*** + **" = ?"**,  
 **new** String[] { String.*valueOf*(student.getID()) });  
 cursor.close();  
 result = **true**;  
 }  
 db.close();  
 **return** result;  
 }  
}