儲存資料

1. 請參考投影片內容，建立以下的Android應用程式

並請將1.**建立過程**; 2.程式**執行結果**截圖; 2.程式**原始檔 copy&paste**置入作業中

1. 請參考範例
   1. 改寫數字比大小遊戲,並使用SharedPreferences儲存資料,其功能有
      * 儲存局數,輸,贏,平手
      * 載入局數,輸,贏,平手
      * 清除局數,輸,贏,平手

一張含有 監視器, 螢幕擷取畫面, 螢幕 的圖片

自動產生的描述

**package** com.savedatausingsharedpreferences;  
  
**import** android.app.Notification;  
**import** android.app.NotificationManager;  
**import** android.app.PendingIntent;  
**import** android.content.Intent;  
**import** android.content.SharedPreferences;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.support.v7.app.NotificationCompat;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.ImageButton;  
**import** android.widget.ImageView;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 **private static final int *NOTI\_ID*** = 100;  
  
 **private** Button **mBtnSaveResult**,  
 **mBtnLoadResult**,  
 **mBtnClearResult**;  
  
 **private** TextView **mTxtResult**,**mTxV\_S**;  
 **private int checknum**;  
 **private** ImageButton **mImgBtnnum01**, **mImgBtnnum02**, **mImgBtnnum03**, **mImgBtnnum04**, **mImgBtnnum05**, **mImgBtnnum06**;  
 **private** ImageView **mImgViewCom**,**mImgViewPLAY**;  
  
 *// 新增統計遊戲局數和輸贏的變數* **private int miCountSet** = 0,  
 **miCountPlayerWin** = 0,  
 **miCountComWin** = 0,  
 **miCountDraw** = 0;  
  
 **private** Button **mBtnShowResult**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 **mTxV\_S** = (TextView) findViewById(R.id.***V\_S***);  
 **mImgViewPLAY** = (ImageView) findViewById(R.id.***imgViewPLAY***);  
 **mImgViewCom** = (ImageView) findViewById(R.id.***imgViewCom***);  
 **mTxtResult** = (TextView) findViewById(R.id.***txtResult***);  
 **mImgBtnnum01** = (ImageButton) findViewById(R.id.***imgBtn\_num1***);  
 **mImgBtnnum02** = (ImageButton) findViewById(R.id.***imgBtn\_num2***);  
 **mImgBtnnum03** = (ImageButton) findViewById(R.id.***imgBtn\_num3***);  
 **mImgBtnnum04** = (ImageButton) findViewById(R.id.***imgBtn\_num4***);  
 **mImgBtnnum05** = (ImageButton) findViewById(R.id.***imgBtn\_num5***);  
 **mImgBtnnum06** = (ImageButton) findViewById(R.id.***imgBtn\_num6***);  
  
  
 **mImgBtnnum01**.setOnClickListener(**imgBtnNUM01OnClick**);  
 **mImgBtnnum02**.setOnClickListener(**imgBtnNUM02OnClick**);  
 **mImgBtnnum03**.setOnClickListener(**imgBtnNUM03OnClick**);  
 **mImgBtnnum04**.setOnClickListener(**imgBtnNUM04OnClick**);  
 **mImgBtnnum05**.setOnClickListener(**imgBtnNUM05OnClick**);  
 **mImgBtnnum06**.setOnClickListener(**imgBtnNUM06OnClick**);  
  
  
 **mBtnShowResult** = (Button) findViewById(R.id.***btnShowResult***);  
 **mBtnShowResult**.setOnClickListener(**btnShowResultOnClick**);  
  
 **mBtnShowResult** = (Button)findViewById(R.id.***btnShowResult***);  
 **mBtnShowResult**.setOnClickListener(**btnShowResultOnClick**);  
  
 **mBtnSaveResult** = (Button)findViewById(R.id.***btnSaveResult***);  
 **mBtnLoadResult** = (Button)findViewById(R.id.***btnLoadResult***);  
 **mBtnClearResult** = (Button)findViewById(R.id.***btnClearResult***);  
  
 **mBtnSaveResult**.setOnClickListener(**btnSaveResultOnClick**);  
 **mBtnLoadResult**.setOnClickListener(**btnLoadResultOnClick**);  
 **mBtnClearResult**.setOnClickListener(**btnClearResultOnClick**);  
 }  
  
 @Override  
 **protected void** onDestroy() {  
 ((NotificationManager) getSystemService(***NOTIFICATION\_SERVICE***))  
 .cancel(***NOTI\_ID***);  
  
 **super**.onDestroy();  
 }  
  
 **private** View.OnClickListener **imgBtnNUM01OnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **miCountSet**++;  
 **int** iComPlay = (**int**) (Math.*random*() \* 6 + 1);  
 **checknum** = 1;  
 **mTxV\_S**.setText(getString(R.string.***V\_S***));  
 **if** (iComPlay == **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_1***);  
 **mTxtResult**.setText(getString(R.string.***draw***));  
 **miCountDraw**++;  
 } **else if** (iComPlay > **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_1***);  
 **mTxtResult**.setText(getString(R.string.***lose***));  
 **miCountComWin**++;  
 } **else** {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_1***);  
 **mTxtResult**.setText(getString(R.string.***win***));  
 **miCountPlayerWin**++;  
 }  
 **switch** (iComPlay) {  
 **case** 1:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_1***);  
 ;  
 **break**;  
 **case** 2:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_2***);  
 ;  
 **break**;  
 **case** 3:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_3***);  
 ;  
 **break**;  
 **case** 4:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_4***);  
 ;  
 **break**;  
 **case** 5:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_5***);  
 ;  
 **break**;  
 **case** 6:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_6***);  
 ;  
 **break**;  
 **default**:  
 }  
 }  
 };  
  
 **private** View.OnClickListener **imgBtnNUM02OnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **miCountSet**++;  
 **int** iComPlay = (**int**) (Math.*random*() \* 6 + 1);  
 **checknum** = 2;  
 **mTxV\_S**.setText(getString(R.string.***V\_S***));  
 ;  
 **if** (iComPlay == **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_2***);  
 **mTxtResult**.setText(getString(R.string.***draw***));  
 **miCountDraw**++;  
 } **else if** (iComPlay > **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_2***);  
 **mTxtResult**.setText(getString(R.string.***lose***));  
 **miCountComWin**++;  
 } **else** {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_2***);  
 **mTxtResult**.setText(getString(R.string.***win***));  
 **miCountPlayerWin**++;  
 }  
 **switch** (iComPlay) {  
 **case** 1:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_1***);  
 ;  
 **break**;  
 **case** 2:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_2***);  
 ;  
 **break**;  
 **case** 3:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_3***);  
 ;  
 **break**;  
 **case** 4:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_4***);  
 ;  
 **break**;  
 **case** 5:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_5***);  
 ;  
 **break**;  
 **case** 6:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_6***);  
 ;  
 **break**;  
 **default**:  
 }  
 }  
 };  
  
 **private** View.OnClickListener **imgBtnNUM03OnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **miCountSet**++;  
 **int** iComPlay = (**int**) (Math.*random*() \* 6 + 1);  
 **checknum** = 3;  
 **mTxV\_S**.setText(getString(R.string.***V\_S***));  
 **if** (iComPlay == **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_3***);  
 **mTxtResult**.setText(getString(R.string.***draw***));  
 **miCountDraw**++;  
 } **else if** (iComPlay > **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_3***);  
 **mTxtResult**.setText(getString(R.string.***lose***));  
 **miCountComWin**++;  
 } **else** {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_3***);  
 **mTxtResult**.setText(getString(R.string.***win***));  
 **miCountPlayerWin**++;  
 }  
 **switch** (iComPlay) {  
 **case** 1:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_1***);  
 ;  
 **break**;  
 **case** 2:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_2***);  
 ;  
 **break**;  
 **case** 3:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_3***);  
 ;  
 **break**;  
 **case** 4:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_4***);  
 ;  
 **break**;  
 **case** 5:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_5***);  
 ;  
 **break**;  
 **case** 6:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_6***);  
 ;  
 **break**;  
 **default**:  
 }  
 }  
 };  
 **private** View.OnClickListener **imgBtnNUM04OnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **miCountSet**++;  
 **int** iComPlay = (**int**) (Math.*random*() \* 6 + 1);  
 **checknum** = 4;  
 **mTxV\_S**.setText(getString(R.string.***V\_S***));  
 **if** (iComPlay == **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_4***);  
 **mTxtResult**.setText(getString(R.string.***draw***));  
 **miCountDraw**++;  
 } **else if** (iComPlay > **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_4***);  
 **mTxtResult**.setText(getString(R.string.***lose***));  
 **miCountComWin**++;  
 } **else** {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_4***);  
 **mTxtResult**.setText(getString(R.string.***win***));  
 **miCountPlayerWin**++;  
 }  
 **switch** (iComPlay) {  
 **case** 1:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_1***);  
 ;  
 **break**;  
 **case** 2:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_2***);  
 ;  
 **break**;  
 **case** 3:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_3***);  
 ;  
 **break**;  
 **case** 4:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_4***);  
 ;  
 **break**;  
 **case** 5:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_5***);  
 ;  
 **break**;  
 **case** 6:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_6***);  
 ;  
 **break**;  
 **default**:  
 }  
 }  
 };  
  
 **private** View.OnClickListener **imgBtnNUM05OnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **miCountSet**++;  
 **int** iComPlay = (**int**) (Math.*random*() \* 6 + 1);  
 **checknum** = 5;  
 **mTxV\_S**.setText(getString(R.string.***V\_S***));  
 **if** (iComPlay == **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_5***);  
 **mTxtResult**.setText(getString(R.string.***draw***));  
 **miCountDraw**++;  
 } **else if** (iComPlay > **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_5***);  
 **mTxtResult**.setText(getString(R.string.***lose***));  
 **miCountComWin**++;  
 } **else** {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_5***);  
 **mTxtResult**.setText(getString(R.string.***win***));  
 **miCountPlayerWin**++;  
 }  
 **switch** (iComPlay) {  
 **case** 1:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_1***);  
 ;  
 **break**;  
 **case** 2:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_2***);  
 ;  
 **break**;  
 **case** 3:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_3***);  
 ;  
 **break**;  
 **case** 4:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_4***);  
 ;  
 **break**;  
 **case** 5:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_5***);  
 ;  
 **break**;  
 **case** 6:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_6***);  
 ;  
 **break**;  
 **default**:  
 }  
 }  
 };  
 **private** View.OnClickListener **imgBtnNUM06OnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **miCountSet**++;  
 **int** iComPlay = (**int**) (Math.*random*() \* 6 + 1);  
 **checknum** = 6;  
 **mTxV\_S**.setText(getString(R.string.***V\_S***));  
 **if** (iComPlay == **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_6***);  
 **mTxtResult**.setText(getString(R.string.***draw***));  
 **miCountDraw**++;  
 } **else if** (iComPlay > **checknum**) {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_6***);  
 **mTxtResult**.setText(getString(R.string.***lose***));  
 **miCountComWin**++;  
 } **else** {  
 **mImgViewPLAY**.setImageResource(R.drawable.***num\_6***);  
 **mTxtResult**.setText(getString(R.string.***win***));  
 **miCountPlayerWin**++;  
 }  
 **switch** (iComPlay) {  
 **case** 1:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_1***);  
 ;  
 **break**;  
 **case** 2:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_2***);  
 ;  
 **break**;  
 **case** 3:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_3***);  
 ;  
 **break**;  
 **case** 4:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_4***);  
 ;  
 **break**;  
 **case** 5:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_5***);  
 ;  
 **break**;  
 **case** 6:  
 **mImgViewCom**.setImageResource(R.drawable.***num\_6***);  
 ;  
 **break**;  
 **default**:  
 }  
 }  
 };  
  
  
 **private** View.OnClickListener **btnShowResultOnClick** = **new** View.OnClickListener() {  
 **public void** onClick(View v) {  
 Intent it = **new** Intent();  
 it.setClass(MainActivity.**this**, GameResultActivity.**class**);  
  
 Bundle bundle = **new** Bundle();  
 bundle.putInt(**"KEY\_COUNT\_SET"**, **miCountSet**);  
 bundle.putInt(**"KEY\_COUNT\_PLAYER\_WIN"**, **miCountPlayerWin**);  
 bundle.putInt(**"KEY\_COUNT\_COM\_WIN"**, **miCountComWin**);  
 bundle.putInt(**"KEY\_COUNT\_DRAW"**, **miCountDraw**);  
 it.putExtras(bundle);  
  
 startActivity(it);  
 }  
  
 };  
  
 **private void** showNotification(String sMsg) {  
 Intent it = **new** Intent(getApplicationContext(), GameResultActivity.**class**);  
 it.setFlags(Intent.***FLAG\_ACTIVITY\_NEW\_TASK***);  
 Bundle bundle = **new** Bundle();  
 bundle.putInt(**"KEY\_COUNT\_SET"**, **miCountSet**);  
 bundle.putInt(**"KEY\_COUNT\_PLAYER\_WIN"**, **miCountPlayerWin**);  
 bundle.putInt(**"KEY\_COUNT\_COM\_WIN"**, **miCountComWin**);  
 bundle.putInt(**"KEY\_COUNT\_DRAW"**, **miCountDraw**);  
 it.putExtras(bundle);  
  
 PendingIntent penIt = PendingIntent.*getActivity*(getApplicationContext(),  
 0, it, PendingIntent. ***FLAG\_CANCEL\_CURRENT***);  
  
 Notification noti = **new** Notification.Builder(**this**)  
 .setSmallIcon(android.R.drawable.***btn\_star\_big\_on***)  
 .setTicker(sMsg)  
 .setContentTitle(getString(R.string.***app\_name***))  
 .setContentText(sMsg)  
 .setContentIntent(penIt)  
 .build();  
  
 NotificationManager notiMgr =  
 (NotificationManager) getSystemService(***NOTIFICATION\_SERVICE***);  
 notiMgr.notify(***NOTI\_ID***, noti);  
 }  
  
 **private** View.OnClickListener **btnSaveResultOnClick** = **new** View.OnClickListener() {  
 **public void** onClick(View v) {  
 SharedPreferences gameResultData =  
 getSharedPreferences(**"GAME\_RESULT"**, 0);  
  
 gameResultData.edit()  
 .putInt(**"COUNT\_SET"**, **miCountSet**)  
 .putInt(**"COUNT\_PLAYER\_WIN"**, **miCountPlayerWin**)  
 .putInt(**"COUNT\_COM\_WIN"**, **miCountComWin**)  
 .putInt(**"COUNT\_DRAW"**, **miCountDraw**)  
 .commit();  
  
 Toast.*makeText*(MainActivity.**this**, **"儲存完成"**, Toast.***LENGTH\_LONG***)  
 .show();  
 }  
 };  
  
 **private** View.OnClickListener **btnLoadResultOnClick** = **new** View.OnClickListener() {  
 **public void** onClick(View v) {  
 SharedPreferences gameResultData =  
 getSharedPreferences(**"GAME\_RESULT"**, 0);  
  
 **miCountSet** = gameResultData.getInt(**"COUNT\_SET"**, 0);  
 **miCountPlayerWin** = gameResultData.getInt(**"COUNT\_PLAYER\_WIN"**, 0);  
 **miCountComWin** = gameResultData.getInt(**"COUNT\_COM\_WIN"**, 0);  
 **miCountDraw** = gameResultData.getInt(**"COUNT\_DRAW"**, 0);  
  
 Toast.*makeText*(MainActivity.**this**, **"載入完成"**, Toast.***LENGTH\_LONG***)  
 .show();  
 }  
 };  
  
 **private** View.OnClickListener **btnClearResultOnClick** = **new** View.OnClickListener() {  
 **public void** onClick(View v) {  
 SharedPreferences gameResultData =  
 getSharedPreferences(**"GAME\_RESULT"**, 0);  
  
 gameResultData.edit()  
 .clear()  
 .commit();  
  
 Toast.*makeText*(MainActivity.**this**, **"清除完成"**, Toast.***LENGTH\_LONG***)  
 .show();  
 }  
 };  
}

1. 請參考範例
   1. 使用SQLite建立修課資料,其欄位如下,可以加入,查詢與列表
      * 姓名
      * 學號
      * 課程1,學分
      * 課程2,學分
      * 課程3,學分
      * 課程4,學分
      * 課程5,學分

一張含有 螢幕擷取畫面 的圖片

自動產生的描述

**package** com.sqlitedatabase;  
  
**import** android.content.ContentValues;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 **private static final** String ***DB\_FILE*** = **"friends.db"**,  
 ***DB\_TABLE*** = **"friends"**;  
 **private** SQLiteDatabase **mFriendDb**;  
  
 **private** EditText **mEdtName**,  
 **mEdtSex**,  
 **mEdtAddr1**,  
 **mEdtAddr2**,  
 **mEdtAddr3**,  
 **mEdtList**;  
  
 **private** Button **mBtnAdd**,  
 **mBtnQuery**,  
 **mBtnList**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 FriendDbOpenHelper friendDbOpenHelper =  
 **new** FriendDbOpenHelper(getApplicationContext(), ***DB\_FILE***, **null**, 1);  
 **mFriendDb** = friendDbOpenHelper.getWritableDatabase();  
  
 *// 檢查資料表是否已經存在，如果不存在，就建立一個。* Cursor cursor = **mFriendDb**.rawQuery(  
 **"select DISTINCT tbl\_name from sqlite\_master where tbl\_name = '"** +  
 ***DB\_TABLE*** + **"'"**, **null**);  
  
 **if**(cursor != **null**) {  
 **if**(cursor.getCount() == 0) *// 沒有資料表，要建立一個資料表。* **mFriendDb**.execSQL(**"CREATE TABLE "** + ***DB\_TABLE*** + **" ("** +  
 **"\_id INTEGER PRIMARY KEY,"** +  
 **"name TEXT NOT NULL,"** +  
 **"sex TEXT,"** +  
 **"address1 TEXT,"** +  
 **"address2 TEXT,"** +  
 **"address3 TEXT"** +  
 **");"**);  
  
 cursor.close();  
 }  
  
 **mEdtName** = (EditText)findViewById(R.id.***edtName***);  
 **mEdtSex** = (EditText)findViewById(R.id.***edtSex***);  
 **mEdtAddr1** = (EditText)findViewById(R.id.***edtAddr1***);  
 **mEdtAddr2** = (EditText)findViewById(R.id.***edtAddr2***);  
 **mEdtAddr3** = (EditText)findViewById(R.id.***edtAddr3***);  
 **mEdtList** = (EditText)findViewById(R.id.***edtList***);  
  
 **mBtnAdd** = (Button)findViewById(R.id.***btnAdd***);  
 **mBtnQuery** = (Button)findViewById(R.id.***btnQuery***);  
 **mBtnList** = (Button)findViewById(R.id.***btnList***);  
  
 **mBtnAdd**.setOnClickListener(**btnAddOnClick**);  
 **mBtnQuery**.setOnClickListener(**btnQueryOnClick**);  
 **mBtnList**.setOnClickListener(**btnListOnClick**);  
 }  
  
 @Override  
 **protected void** onDestroy() {  
 **super**.onDestroy();  
 **mFriendDb**.close();  
 }  
  
 **private** View.OnClickListener **btnAddOnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
  
 ContentValues newRow = **new** ContentValues();  
 newRow.put(**"name"**, **mEdtName**.getText().toString());  
 newRow.put(**"sex"**, **mEdtSex**.getText().toString());  
 newRow.put(**"address1"**, **mEdtAddr1**.getText().toString());  
 newRow.put(**"address2"**, **mEdtAddr2**.getText().toString());  
 newRow.put(**"address3"**, **mEdtAddr3**.getText().toString());  
 **mFriendDb**.insert(***DB\_TABLE***, **null**, newRow);  
 }  
 };  
  
 **private** View.OnClickListener **btnQueryOnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 Cursor c = **null**;  
  
 **if** (!**mEdtName**.getText().toString().equals(**""**)) {  
 c = **mFriendDb**.query(**true**, ***DB\_TABLE***, **new** String[]{**"name"**, **"sex"**,  
 **"address1"**,**"address2"**,**"address3"**}, **"name="** + **"\""** + **mEdtName**.getText().toString()  
 + **"\""**, **null**, **null**, **null**, **null**, **null**);  
 } **else if** (!**mEdtSex**.getText().toString().equals(**""**)) {  
 c = **mFriendDb**.query(**true**, ***DB\_TABLE***, **new** String[]{**"name"**, **"sex"**,  
 **"address1"**,**"address2"**,**"address3"**}, **"sex="** + **"\""** + **mEdtSex**.getText().toString()  
 + **"\""**, **null**, **null**, **null**, **null**, **null**);  
 } **else if** (!**mEdtAddr1**.getText().toString().equals(**""**)) {  
 c = **mFriendDb**.query(**true**, ***DB\_TABLE***, **new** String[]{**"name"**, **"sex"**,  
 **"address1"**,**"address2"**,**"address3"**}, **"address1="** + **"\""** + **mEdtAddr1**.getText().toString()  
 + **"\""**, **null**, **null**, **null**, **null**, **null**);  
 } **else if** (!**mEdtAddr2**.getText().toString().equals(**""**)) {  
 c = **mFriendDb**.query(**true**, ***DB\_TABLE***, **new** String[]{**"name"**, **"sex"**,  
 **"address1"**,**"address2"**,**"address3"**}, **"address2="** + **"\""** + **mEdtAddr2**.getText().toString()  
 + **"\""**, **null**, **null**, **null**, **null**, **null**);  
 } **else if** (!**mEdtAddr3**.getText().toString().equals(**""**)) {  
 c = **mFriendDb**.query(**true**, ***DB\_TABLE***, **new** String[]{**"name"**, **"sex"**,  
 **"address1"**,**"address2"**,**"address3"**}, **"address3="** + **"\""** + **mEdtAddr3**.getText().toString()  
 + **"\""**, **null**, **null**, **null**, **null**, **null**);  
 }  
  
 **if** (c == **null**)  
 **return**;  
  
 **if** (c.getCount() == 0) {  
 **mEdtList**.setText(**""**);  
 Toast.*makeText*(MainActivity.**this**, **"沒有這筆資料"**, Toast.***LENGTH\_LONG***)  
 .show();  
 } **else** {  
 c.moveToFirst();  
 **mEdtList**.setText(c.getString(0) + c.getString(1) + c.getString(2)+ c.getString(3)+ c.getString(4));  
  
 **while** (c.moveToNext())  
 **mEdtList**.append(**"\n"** + c.getString(0) +**" "**+ c.getString(1) +**" "**+  
 c.getString(2)+**" "**+ c.getString(3)+**" "**+ c.getString(4));  
 }  
 }  
 };  
  
 **private** View.OnClickListener **btnListOnClick** = **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 Cursor c = **mFriendDb**.query(**true**, ***DB\_TABLE***, **new** String[]{**"name"**, **"sex"**,  
 **"address1"**,**"address2"**,**"address3"**}, **null**, **null**, **null**, **null**, **null**, **null**);  
  
 **if** (c == **null**)  
 **return**;  
  
 **if** (c.getCount() == 0) {  
 **mEdtList**.setText(**""**);  
 Toast.*makeText*(MainActivity.**this**, **"沒有資料"**, Toast.***LENGTH\_LONG***)  
 .show();  
 }  
 **else** {  
 c.moveToFirst();  
 **mEdtList**.setText(c.getString(0) + c.getString(1) + c.getString(2)+ c.getString(3)+ c.getString(4));  
  
 **while** (c.moveToNext())  
 **mEdtList**.append(**"\n"** + c.getString(0) +**" "**+ c.getString(1) +**" "**+  
 c.getString(2)+**" "**+ c.getString(3)+**" "**+ c.getString(4));  
 }  
 }  
 };  
}