



# UNIVERSIDAD DE COLIMA

Universidad de Colima

Facultad de Telemática

Ingeniería de software

Programación de Móviles

## **Almacenamiento en una base de datos SQLite con Android y Kotlin**

Segunda parcial

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5°D

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## Codigo XML

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <EditText
            android:id="@+id/et1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:ems="10"
            android:hint="Ingresa codigo"
            android:inputType="textPersonName"
            android:textAppearance="@style/TextAppearance.AppCompat.Large" />

        <EditText
            android:id="@+id/et2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:ems="10"
            android:hint="Ingresa descripcion"
            android:inputType="textPersonName"
            android:textAppearance="@style/TextAppearance.AppCompat.Large" />

        <EditText
            android:id="@+id/et3"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:ems="10"
            android:hint="Ingresa precio"
            android:inputType="textPersonName"
            android:textAppearance="@style/TextAppearance.AppCompat.Large" />

        <Button
            android:id="@+id/b1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Alta"
            android:textAppearance="@style/TextAppearance.AppCompat.Large" />

        <Button
            android:id="@+id/b2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Consulta por codigo"
```

```

        android:textAppearance="@style/TextAppearance.AppCompat.Large" />

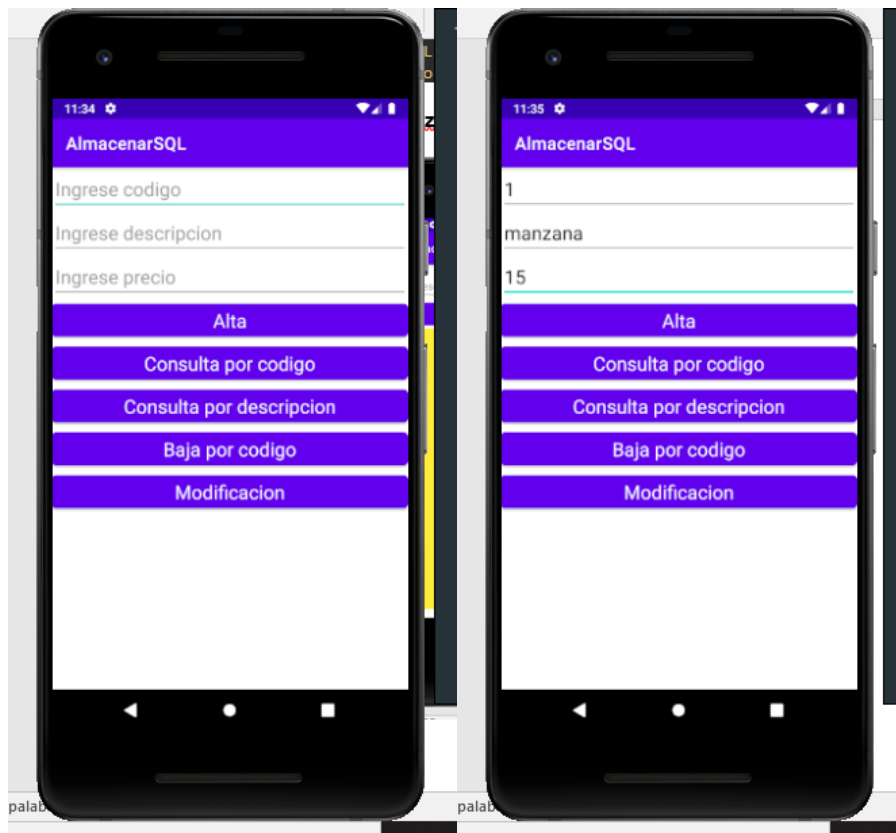
<Button
    android:id="@+id/b3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Consulta por descripcion"
    android:textAppearance="@style/TextAppearance.AppCompat.Large" />

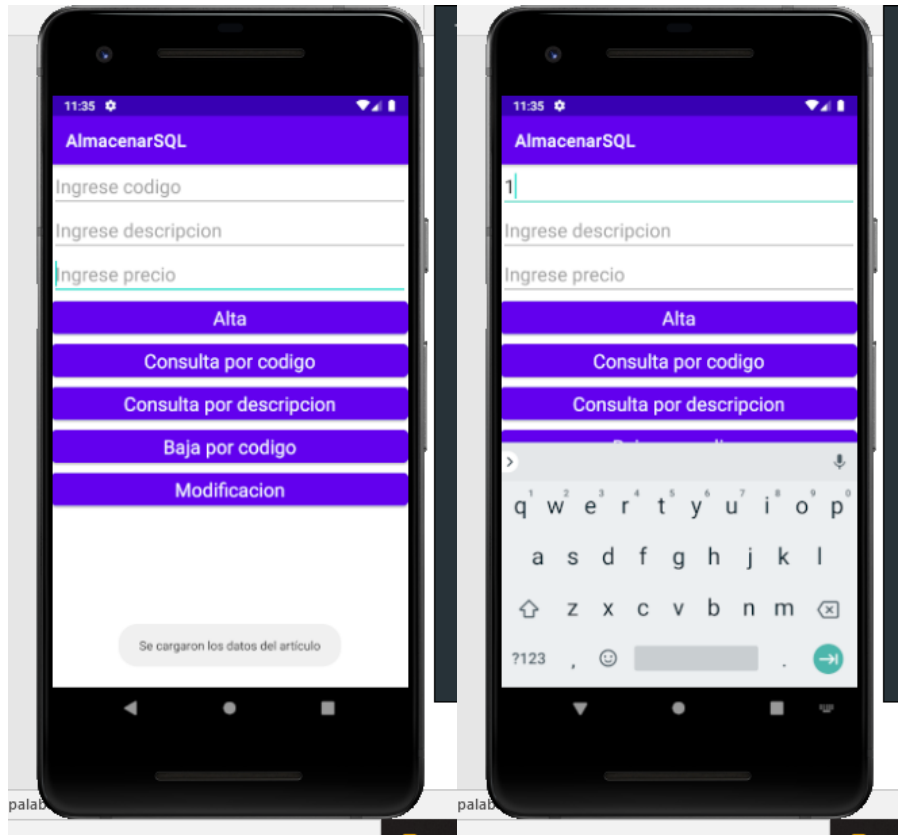
<Button
    android:id="@+id/b4"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Baja por codigo"
    android:textAppearance="@style/TextAppearance.AppCompat.Large" />

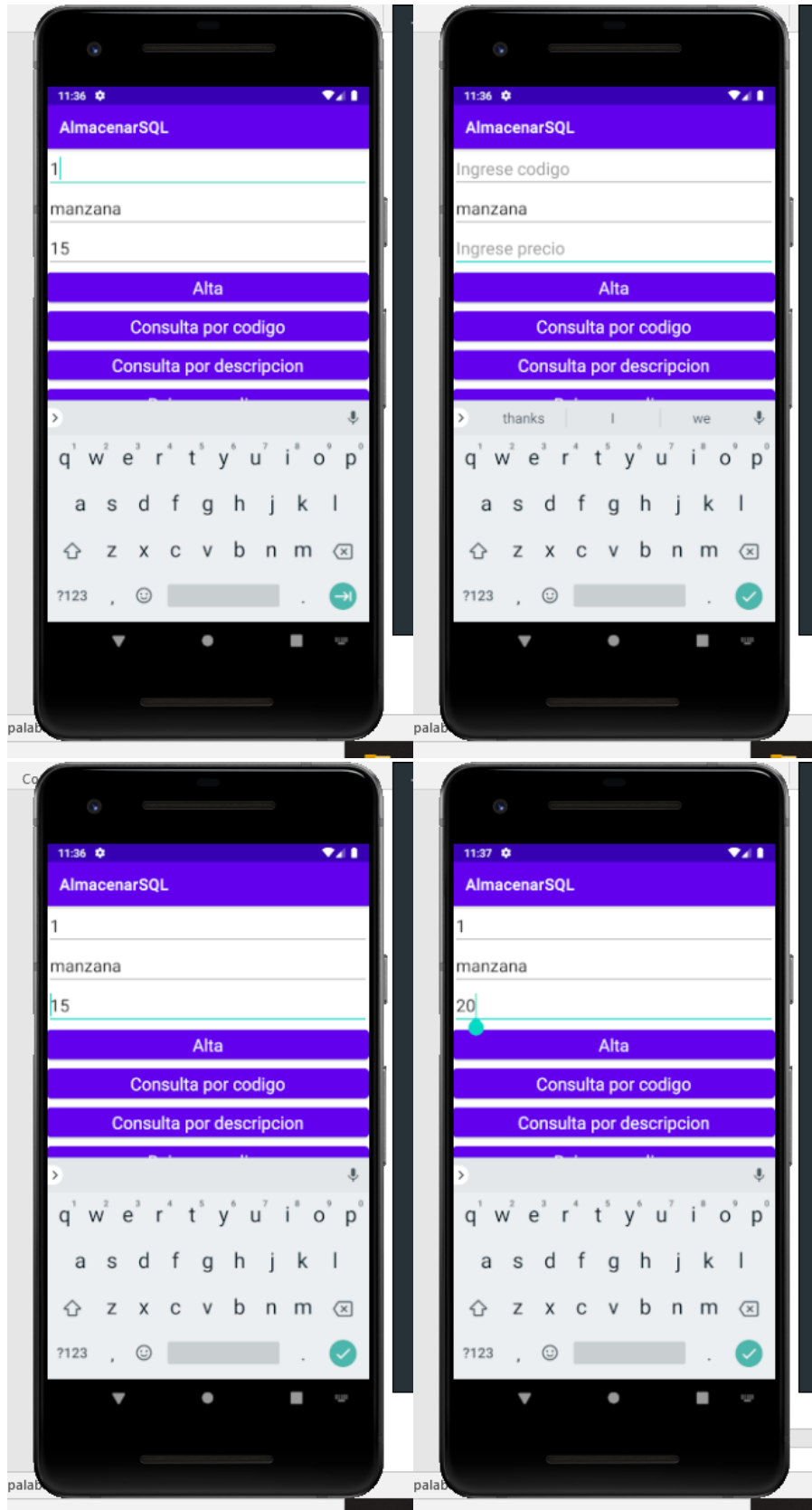
<Button
    android:id="@+id/b5"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Modificacion"
    android:textAppearance="@style/TextAppearance.AppCompat.Large" />
</LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

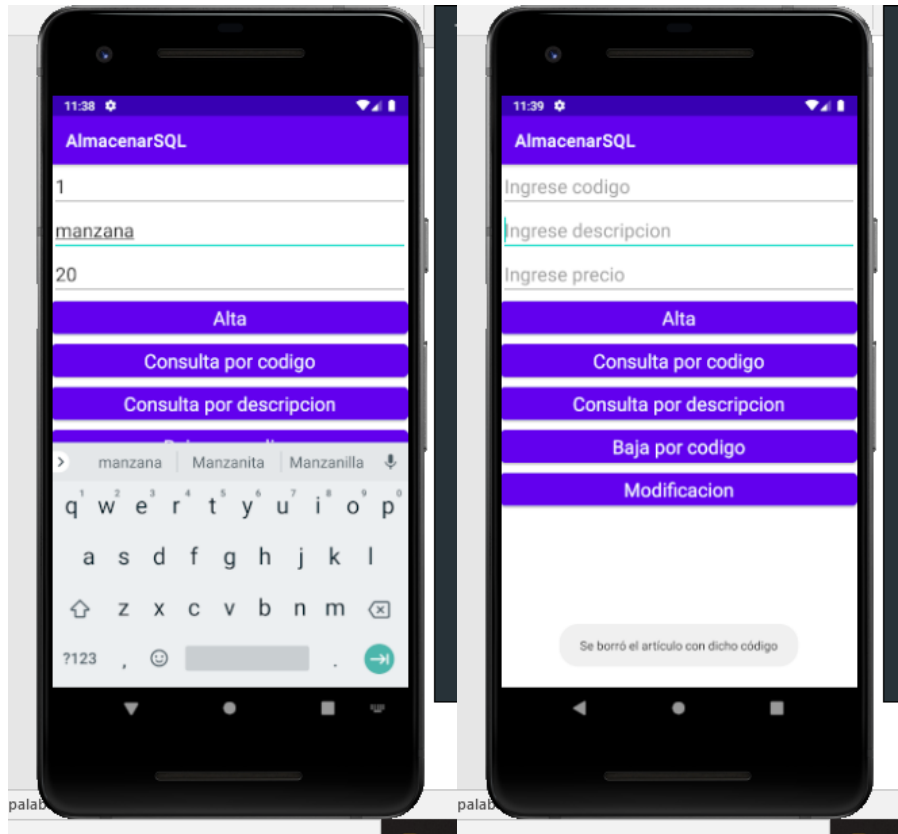
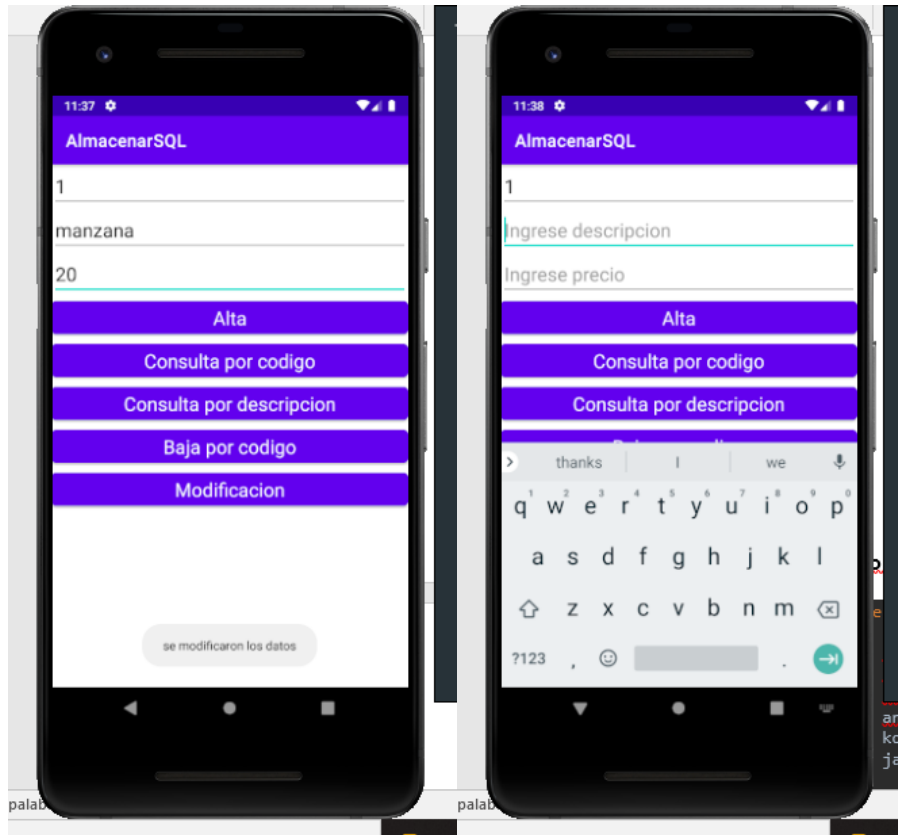
```

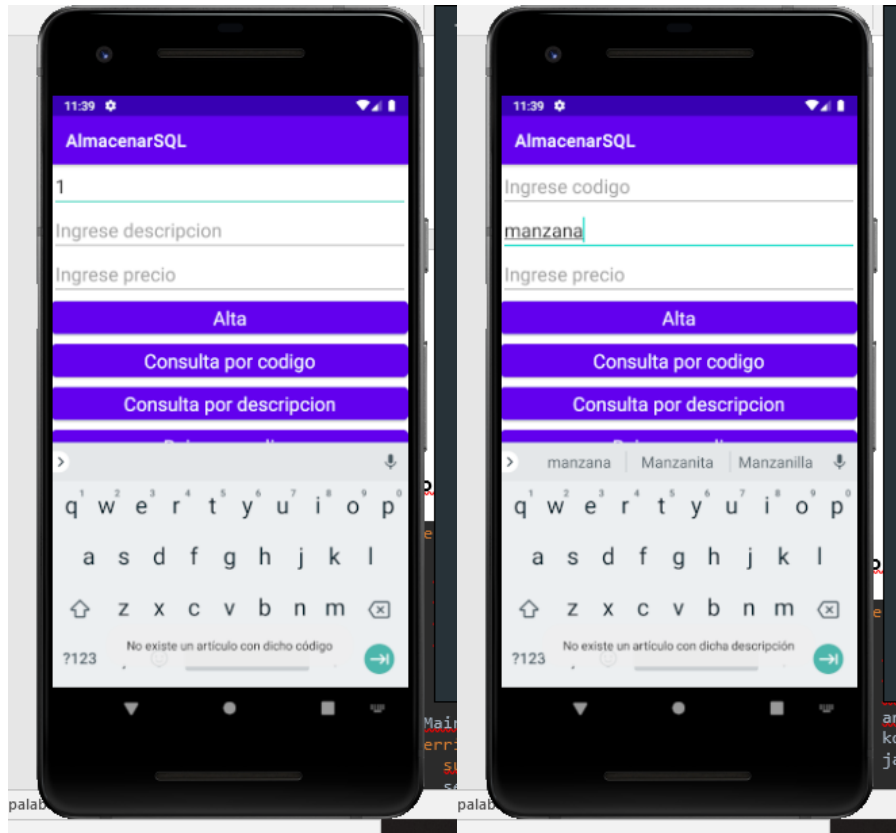
## Interfaz











### Codigo MainActivity

```
package com.example.almacenarsql

import android.content.ContentValues
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Toast
import kotlinx.android.synthetic.main.activity_main.*

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        b1.setOnClickListener {
            val admin = AdminSQLiteOpenHelper(this,"administracion", null, 1)
            val bd = admin.writableDatabase
            val registro = ContentValues()
            registro.put("codigo", et1.getText().toString())
            registro.put("descripcion", et2.getText().toString())
            registro.put("precio", et3.getText().toString())
            bd.insert("articulos", null, registro)
            bd.close()
            et1.setText("")
            et2.setText("")
            et3.setText("")
        }
    }
}
```

```

        Toast.makeText(this, "Se cargaron los datos del artículo",
Toast.LENGTH_SHORT).show()
    }

    b2.setOnClickListener {
        val admin = AdminSQLiteOpenHelper(this, "administracion", null, 1)
        val bd = admin.writableDatabase
        val fila = bd.rawQuery("select descripcion,precio from articulos
where codigo=${et1.text.toString()}", null)
        if (fila.moveToFirst()) {
            et2.setText(fila.getString(0))
            et3.setText(fila.getString(1))
        } else
            Toast.makeText(this, "No existe un artículo con dicho código",
Toast.LENGTH_SHORT).show()
        bd.close()
    }

    b3.setOnClickListener {
        val admin = AdminSQLiteOpenHelper(this, "administracion", null, 1)
        val bd = admin.writableDatabase
        val fila = bd.rawQuery("select codigo,precio from articulos where
descripcion='${et2.text.toString()}'", null)
        if (fila.moveToFirst()) {
            et1.setText(fila.getString(0))
            et3.setText(fila.getString(1))
        } else
            Toast.makeText(this, "No existe un artículo con dicha
descripción", Toast.LENGTH_SHORT).show()
        bd.close()
    }

    b4.setOnClickListener {
        val admin = AdminSQLiteOpenHelper(this, "administracion", null, 1)
        val bd = admin.writableDatabase
        val cant = bd.delete("articulos", "codigo=${et1.text.toString()}",
null)
        bd.close()
        et1.setText("")
        et2.setText("")
        et3.setText("")
        if (cant == 1)
            Toast.makeText(this, "Se borró el artículo con dicho código",
Toast.LENGTH_SHORT).show()
        else
            Toast.makeText(this, "No existe un artículo con dicho código",
Toast.LENGTH_SHORT).show()
    }

    b5.setOnClickListener {
        val admin = AdminSQLiteOpenHelper(this, "administracion", null, 1)
        val bd = admin.writableDatabase
        val registro = ContentValues()
        registro.put("descripcion", et2.text.toString())
        registro.put("precio", et3.text.toString())
    }

```



```

        val cant = bd.update("articulos", registro,
"codigo=${et1.text.toString()}", null)
        bd.close()
        if (cant == 1)
            Toast.makeText(this, "se modificaron los datos",
Toast.LENGTH_SHORT).show()
        else
            Toast.makeText(this, "no existe un artículo con el código
ingresado", Toast.LENGTH_SHORT).show()
        }
    }
}

```

## Codigo AdminSQLiteOpenHelper

```

package com.example.almacenarsql

import android.content.Context
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper

class AdminSQLiteOpenHelper(context: Context, name: String, factory:
SQLiteDatabase.CursorFactory?, version: Int) : SQLiteOpenHelper(context, name,
factory, version) {

    override fun onCreate(db: SQLiteDatabase) {
        db.execSQL("create table articulos(codigo int primary key, descripcion
text, precio real)")
    }

    override fun onUpgrade(db: SQLiteDatabase, oldVersion: Int, newVersion: Int)
{

    }
}

```