

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
    <!-- AndroidManifest.xml -->
    <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
    <uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.MyApplicationAss13"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">

    <EditText
```

```
    android:id="@+id/etName"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Name" />
```

```
<EditText
    android:id="@+id/etAddress"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Address" />
```

```
<EditText
    android:id="@+id/etPhno"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:inputType="phone"
    android:hint="Phone Number" />
```

```
<Button
    android:id="@+id/btnInsert"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Insert Customer" />
```

```
<Button
    android:id="@+id/btnShowDetails"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Show Customer Details" />
```

```
<TextView
    android:id="@+id/tvCustomerDetails"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="Customer Details will appear here"
    android:textSize="16sp" />
```

```
</LinearLayout>
```

DatabaseHelper.java

```
package com.example.myapplicationass13;
```

```

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

public class DatabaseHelper extends SQLiteOpenHelper {
    private static final String DATABASE_NAME = "customer_db";
    private static final int DATABASE_VERSION = 1;

    // Customer table creation query
    private static final String CREATE_TABLE_CUSTOMER = "CREATE TABLE Customer (id
INTEGER PRIMARY KEY AUTOINCREMENT, name TEXT, address TEXT, phno TEXT);";

    public DatabaseHelper(Context context) {
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
    }

    @Override
    public void onCreate(SQLiteDatabase db) {
        // Create tables
        db.execSQL(CREATE_TABLE_CUSTOMER);
    }

    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        // Handle database upgrades, if needed
    }
}

```

MainActivity.java

```

package com.example.myapplicationass13;

import android.content.ContentValues;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;

```

```

public class MainActivity extends AppCompatActivity {
    private EditText etName, etAddress, etPhno;
    private TextView tvCustomerDetails;
    private Button btnInsert, btnShowDetails;

    private DatabaseHelper databaseHelper;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        databaseHelper = new DatabaseHelper(this);

        etName = findViewById(R.id.etName);
        etAddress = findViewById(R.id.etAddress);
        etPhno = findViewById(R.id.etPhno);
        tvCustomerDetails = findViewById(R.id.tvCustomerDetails);
        btnInsert = findViewById(R.id.btnInsert);
        btnShowDetails = findViewById(R.id.btnShowDetails);

        btnInsert.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                insertCustomer();
            }
        });

        btnShowDetails.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                showCustomerDetails();
            }
        });
    }

    private void insertCustomer() {
        SQLiteDatabase db = databaseHelper.getWritableDatabase();

        ContentValues values = new ContentValues();
        values.put("name", etName.getText().toString());
        values.put("address", etAddress.getText().toString());
        values.put("phno", etPhno.getText().toString());
    }
}

```

```

long newRowId = db.insert("Customer", null, values);

if (newRowId != -1) {
    // Successfully inserted
    // You can show a success message or clear the input fields
} else {
    // Insert failed
    // Handle the error
}

db.close();
}

private void showCustomerDetails() {
    SQLiteDatabase db = databaseHelper.getReadableDatabase();

    String[] projection = {"id", "name", "address", "phno"};
    Cursor cursor = db.query("Customer", projection, null, null, null, null, null);

    StringBuilder details = new StringBuilder();

    while (cursor.moveToNext()) {
        int id = cursor.getInt(cursor.getColumnIndexOrThrow("id"));
        String name = cursor.getString(cursor.getColumnIndexOrThrow("name"));
        String address = cursor.getString(cursor.getColumnIndexOrThrow("address"));
        String phno = cursor.getString(cursor.getColumnIndexOrThrow("phno"));

        details.append("ID: ").append(id).append(", Name: ").append(name)
            .append(", Address: ").append(address).append(", Phone: ")
            .append(phno).append("\n");
    }

    tvCustomerDetails.setText(details.toString());

    cursor.close();
    db.close();
}
}

```