XML

<?**xml** version="1.0" encoding="utf-8"?>

<**AbsoluteLayout** xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout\_width="match\_parent"

    android:layout\_height="match\_parent">

    <**TextView**

        android:layout\_width="wrap\_content"

        android:layout\_height="wrap\_content"

        android:layout\_x="50dp"

        android:layout\_y="20dp"

        android:text="Student Details"

        android:textSize="30sp" />

    <**TextView**

        android:layout\_width="wrap\_content"

        android:layout\_height="wrap\_content"

        android:layout\_x="20dp"

        android:layout\_y="110dp"

        android:text="Enter Rollno:"

        android:textSize="20sp" />

    <**EditText**

        android:id="@+id/Rollno"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="175dp"

        android:layout\_y="100dp"

        android:inputType="number"

        android:textSize="20sp" />

    <**TextView**

        android:layout\_width="wrap\_content"

        android:layout\_height="wrap\_content"

        android:layout\_x="20dp"

        android:layout\_y="160dp"

        android:text="Enter Name:"

        android:textSize="20sp" />

    <**EditText**

        android:id="@+id/Name"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="175dp"

        android:layout\_y="150dp"

        android:inputType="text"

        android:textSize="20sp" />

    <**TextView**

        android:layout\_width="wrap\_content"

        android:layout\_height="wrap\_content"

        android:layout\_x="20dp"

        android:layout\_y="210dp"

        android:text="Enter Marks:"

        android:textSize="20sp" />

    <**EditText**

        android:id="@+id/Marks"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="175dp"

        android:layout\_y="200dp"

        android:inputType="number"

        android:textSize="20sp" />

    <**Button**

        android:id="@+id/Insert"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="25dp"

        android:layout\_y="300dp"

        android:text="Insert"

        android:textSize="30dp" />

    <**Button**

        android:id="@+id/Delete"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="200dp"

        android:layout\_y="300dp"

        android:text="Delete"

        android:textSize="30dp" />

    <**Button**

        android:id="@+id/Update"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="25dp"

        android:layout\_y="400dp"

        android:text="Update"

        android:textSize="30dp" />

    <**Button**

        android:id="@+id/View"

        android:layout\_width="150dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="200dp"

        android:layout\_y="400dp"

        android:text="View"

        android:textSize="30dp" />

    <**Button**

        android:id="@+id/ViewAll"

        android:layout\_width="200dp"

        android:layout\_height="wrap\_content"

        android:layout\_x="100dp"

        android:layout\_y="500dp"

        android:text="View All"

        android:textSize="30dp" />

</**AbsoluteLayout**>

JAVA CODE

**package** com.example.exno5;

**import** android.app.Activity;

**import** android.app.AlertDialog.Builder;

**import** android.content.Context;

**import** android.database.Cursor;

**import** android.database.sqlite.SQLiteDatabase;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.view.View.OnClickListener;

**import** android.widget.Button;

**import** android.widget.EditText;

**public** **class** MainActivity **extends** Activity **implements** OnClickListener

{

    EditText Rollno,Name,Marks;

    Button Insert,Delete,Update,View,ViewAll;

    SQLiteDatabase db;

    /\*\* Called when the activity is first created. \*/

    @Override

**public** **void** onCreate(Bundle savedInstanceState)

    {

**super**.onCreate(savedInstanceState);

        setContentView(R.layout.activity\_main);

        Rollno=(EditText)findViewById(R.id.Rollno);

        Name=(EditText)findViewById(R.id.Name);

        Marks=(EditText)findViewById(R.id.Marks);

        Insert=(Button)findViewById(R.id.Insert);

        Delete=(Button)findViewById(R.id.Delete);

        Update=(Button)findViewById(R.id.Update);

        View=(Button)findViewById(R.id.View);

        ViewAll=(Button)findViewById(R.id.ViewAll);

        Insert.setOnClickListener(**this**);

        Delete.setOnClickListener(**this**);

        Update.setOnClickListener(**this**);

        View.setOnClickListener(**this**);

        ViewAll.setOnClickListener(**this**);

        // Creating database and table

        db=openOrCreateDatabase("StudentDB", Context.MODE\_PRIVATE, **null**);

        db.execSQL("CREATE TABLE IF NOT EXISTS student(rollno VARCHAR,name VARCHAR,marks VARCHAR);");

    }

**public** **void** onClick(View view)

    {

        // Inserting a record to the Student table

**if**(view==Insert)

        {

            // Checking for empty fields

**if**(Rollno.getText().toString().trim().length()==0||

                    Name.getText().toString().trim().length()==0||

                    Marks.getText().toString().trim().length()==0)

            {

                showMessage("Error", "Please enter all values");

**return**;

            }

            db.execSQL("INSERT INTO student VALUES('"+Rollno.getText()+"','"+Name.getText()+

                    "','"+Marks.getText()+"');");

            showMessage("Success", "Record added");

            clearText();

        }

        // Deleting a record from the Student table

**if**(view==Delete)

        {

            // Checking for empty roll number

**if**(Rollno.getText().toString().trim().length()==0)

            {

                showMessage("Error", "Please enter Rollno");

**return**;

            }

            Cursor c=db.rawQuery("SELECT \* FROM student WHERE rollno='"+Rollno.getText()+"'", **null**);

**if**(c.moveToFirst())

            {

                db.execSQL("DELETE FROM student WHERE rollno='"+Rollno.getText()+"'");

                showMessage("Success", "Record Deleted");

            }

**else**

            {

                showMessage("Error", "Invalid Rollno");

            }

            clearText();

        }

        // Updating a record in the Student table

**if**(view==Update)

        {

            // Checking for empty roll number

**if**(Rollno.getText().toString().trim().length()==0)

            {

                showMessage("Error", "Please enter Rollno");

**return**;

            }

            Cursor c=db.rawQuery("SELECT \* FROM student WHERE rollno='"+Rollno.getText()+"'", **null**);

**if**(c.moveToFirst()) {

                db.execSQL("UPDATE student SET name='" + Name.getText() + "',marks='" + Marks.getText() +

                        "' WHERE rollno='"+Rollno.getText()+"'");

                showMessage("Success", "Record Modified");

            }

**else** {

                showMessage("Error", "Invalid Rollno");

            }

            clearText();

        }

        // Display a record from the Student table

**if**(view==View)

        {

            // Checking for empty roll number

**if**(Rollno.getText().toString().trim().length()==0)

            {

                showMessage("Error", "Please enter Rollno");

**return**;

            }

            Cursor c=db.rawQuery("SELECT \* FROM student WHERE rollno='"+Rollno.getText()+"'", **null**);

**if**(c.moveToFirst())

            {

                Name.setText(c.getString(1));

                Marks.setText(c.getString(2));

            }

**else**

            {

                showMessage("Error", "Invalid Rollno");

                clearText();

            }

        }

        // Displaying all the records

**if**(view==ViewAll)

        {

            Cursor c=db.rawQuery("SELECT \* FROM student", **null**);

**if**(c.getCount()==0)

            {

                showMessage("Error", "No records found");

**return**;

            }

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

**while**(c.moveToNext())

            {

                buffer.append("Rollno: "+c.getString(0)+"\n");

                buffer.append("Name: "+c.getString(1)+"\n");

                buffer.append("Marks: "+c.getString(2)+"\n\n");

            }

            showMessage("Student Details", buffer.toString());

        }

    }

**public** **void** showMessage(String title,String message)

    {

        Builder builder=**new** Builder(**this**);

        builder.setCancelable(**true**);

        builder.setTitle(title);

        builder.setMessage(message);

        builder.show();

    }

**public** **void** clearText()

    {

        Rollno.setText("");

        Name.setText("");

        Marks.setText("");

        Rollno.requestFocus();

    }

}