XML:-

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

android:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical">

<EditText

android:id="@+id/editTextText"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter Name" />

<EditText

android:id="@+id/editTextText2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter Roll No" />

<Button

android:id="@+id/button"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Add Student" />

<Button

android:id="@+id/button2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="View One" />

<Button

android:id="@+id/button3"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="View All" />

<Button

android:id="@+id/button4"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Delete Student" />

<ListView

android:id="@+id/listView"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content" />

</LinearLayout>

Main\_Activity.kt

package com.example.ws\_11

import android.annotation.SuppressLint

import android.content.Context

import android.database.sqlite.SQLiteDatabase

import android.database.sqlite.SQLiteOpenHelper

import android.os.Bundle

import android.widget.ArrayAdapter

import android.widget.Button

import android.widget.EditText

import android.widget.ListView

import android.widget.Toast

import androidx.activity.enableEdgeToEdge

import androidx.appcompat.app.AppCompatActivity

import androidx.compose.material3.Button

import androidx.core.view.ViewCompat

import androidx.core.view.WindowInsetsCompat

import com.example.ws\_11.R.id

class MainActivity : AppCompatActivity() {

@SuppressLint("MissingInflatedId")

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

*enableEdgeToEdge*()

setContentView(R.layout.*activity\_main*)

val b1 = findViewById<Button>(id.*button*)

val b2 = findViewById<Button>(id.*button2*)

val b3 = findViewById<Button>(id.*button3*)

val b4 = findViewById<Button>(id.*button4*)

val t1 = findViewById<EditText>(id.*editTextText*)

val t2 = findViewById<EditText>(id.*editTextText2*)

val listView = findViewById<ListView>(id.*listView*)

val db = DBHelper(this)

// Button to add a student

b1.setOnClickListener **{**

db.addStudent(db.*writableDatabase*, t1.*text*.toString(), t2.*text*.toString())

Toast.makeText(this, "Student Added", Toast.*LENGTH\_SHORT*).show()

**}**

// Button to view one student

b2.setOnClickListener **{**

val student = db.viewOne(db.*writableDatabase*, t1.*text*.toString(), t2.*text*.toString())

val adapter = ArrayAdapter(this, android.R.layout.*simple\_list\_item\_1*, student)

listView.*adapter* = adapter

**}**

// Button to view all students

b3.setOnClickListener **{**

val students = db.viewAll(db.*writableDatabase*)

val adapter = ArrayAdapter(this, android.R.layout.*simple\_list\_item\_1*, students)

listView.*adapter* = adapter

**}**

// Button to delete a student

b4.setOnClickListener **{**

db.delStudent(db.*writableDatabase*, t1.*text*.toString(), t2.*text*.toString())

Toast.makeText(this, "Student Deleted", Toast.*LENGTH\_SHORT*).show()

**}**

ViewCompat.setOnApplyWindowInsetsListener(findViewById(id.*main*)) **{** v, insets **->**

val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)

insets

**}**

}

}

class DBHelper(context: Context) : SQLiteOpenHelper(context, DB\_Name, null, DB\_Version) {

companion object {

private const val DB\_Name = "mydb"

private const val DB\_Version = 1

private const val TB\_Name = "User"

}

override fun onCreate(db: SQLiteDatabase) {

db.execSQL("CREATE TABLE IF NOT EXISTS $TB\_Name(Name Varchar(45), Roll\_NO varchar(45))")

}

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

*TODO*("Not yet implemented")

}

fun addStudent(db: SQLiteDatabase, name: String, roll: String) {

db.execSQL("INSERT INTO $TB\_Name(Name, Roll\_NO) VALUES('$name', '$roll')")

}

fun viewAll(db: SQLiteDatabase): List<String> {

val str = *mutableListOf*<String>()

val cursor = db.rawQuery("SELECT \* FROM $TB\_Name", null)

cursor.*use* **{**

while (**it**.moveToNext()) {

val rollNo = **it**.getString(1)

val name = **it**.getString(0)

str.add("Roll No: $rollNo, Name: $name")

}

**}**

cursor.close()

return str

}

fun delStudent(db: SQLiteDatabase, name: String, roll: String) {

db.execSQL("DELETE FROM $TB\_Name WHERE Name='$name' AND Roll\_NO='$roll'")

}

fun viewOne(db: SQLiteDatabase, name: String, roll: String): List<String> {

val str = *mutableListOf*<String>()

val cursor = db.rawQuery("SELECT \* FROM $TB\_Name WHERE Name='$name' AND Roll\_NO='$roll'", null)

cursor.*use* **{**

while (**it**.moveToNext()) {

val rollNo = **it**.getString(1)

val Name = **it**.getString(0)

str.add("Roll No: $rollNo, Name: $Name")

}

**}**

cursor.close()

return str

}

}