

Experiment 26

1.

ActivityMain.xml

```
<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:gravity="center"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Insert Data"
        android:textSize="30sp"
        android:textColor="#FF0000"
        android:textStyle="bold"
        android:layout_marginBottom="30dp"/>
    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <EditText
            android:layout_width="350dp"
            android:layout_height="57dp"
            android:hint="Name"
            android:layout_gravity="center"
            android:inputType="text"
            android:id="@+id/editText_name" />
    </com.google.android.material.textfield.TextInputLayout>
    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <EditText
            android:layout_width="350dp"
            android:layout_height="57dp"
            android:layout_marginTop="20dp"
            android:id="@+id/editText_surname"
            android:layout_gravity="center"
            android:hint="Surname"
            android:inputType="text"/>
    </com.google.android.material.textfield.TextInputLayout>
    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <EditText
```

```

        android:layout_width="350dp"
        android:layout_height="57dp"
        android:layout_marginTop="20dp"
        android:id="@+id/editText_Marks"
        android:layout_gravity="center"
        android:hint="Marks"
        android:inputType="text"/>
</com.google.android.material.textfield.TextInputLayout>
<Button
    android:layout_width="350dp"
    android:layout_height="60dp"
    android:layout_marginTop="20dp"
    android:text="Add Data"
    android:id="@+id/button_add"
    android:backgroundTint="#2196F3"
    android:textColor="@color/white"
    android:layout_below="@+id/editText_Marks" />
<Button
    android:layout_width="350dp"
    android:layout_height="60dp"
    android:layout_marginTop="10dp"
    android:text="View All"
    android:backgroundTint="#2196F3"
    android:textColor="@color/white"
    android:id="@+id/button_viewAll" />
</LinearLayout>

```

MainActivity.java

```

package com.example.exp26;
import android.app.Activity;
import android.app.AlertDialog;
import android.database.Cursor;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
public class MainActivity extends Activity {
    DatabaseHelper myDb;
    EditText editName,editSurname,editMarks ,editTextId;
    Button btnAddData;
    Button btnviewAll;
    @Override

```

```

protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    myDb = new DatabaseHelper(this);
    editName = (EditText)findViewById(R.id.editText_name);
    editSurname = (EditText)findViewById(R.id.editText_surname);
    editMarks = (EditText)findViewById(R.id.editText_Marks);
    //editTextId = (EditText)findViewById(R.id.editText_id);
    btnAddData = (Button)findViewById(R.id.button_add);
    btnviewAll = (Button)findViewById(R.id.button_viewAll);
    AddData();
    viewAll();
}

public void AddData() {
    btnAddData.setOnClickListener(
        new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                boolean isInserted =
                    myDb.insertData(editName.getText().toString(),
                                    editSurname.getText().toString(),
                                    editMarks.getText().toString() );
                if(isInserted == true)
                    Toast.makeText(MainActivity.this,"Data
Inserted",Toast.LENGTH_LONG).show();
                else
                    Toast.makeText(MainActivity.this,"Data not
Inserted",Toast.LENGTH_LONG).show();
            }
        }
    );
}

public void viewAll() {
    btnviewAll.setOnClickListener(
        new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Cursor res = myDb.getAllData();
                if(res.getCount() == 0) {
                    // show message
                    showMessage("Error","Nothing found");
                    return;
                }

                StringBuffer buffer = new StringBuffer();
                while (res.moveToNext()) {
                    buffer.append("Id :"+ res.getString(0)+"\n");
                }
            }
        }
    );
}

```

```

        buffer.append("Name :"+ res.getString(1)+"\n");
        buffer.append("Surname :"+ res.getString(2)+"\n");
        buffer.append("Marks :"+ res.getString(3)+"\n\n");
    }
    // Show all data
    showMessage("Data",buffer.toString());
}
}
);
}
public void showMessage(String title,String Message){
    AlertDialog.Builder builder = new AlertDialog.Builder(this);
    builder.setCancelable(true);
    builder.setTitle(title);
    builder.setMessage(Message);
    builder.show();
}
}

```

DatabaseHelper.java

```

package com.example.exp26;
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
public class DatabaseHelper extends SQLiteOpenHelper {
    public static final String DATABASE_NAME = "Student.db";
    public static final String TABLE_NAME = "student_table";
    public static final String COL_1 = "ID";
    public static final String COL_2 = "NAME";
    public static final String COL_3 = "SURNAME";
    public static final String COL_4 = "MARKS";
    public DatabaseHelper(Context context) {
        super(context, DATABASE_NAME, null, 1);
    }
    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("create table " + TABLE_NAME +" (ID INTEGER PRIMARY KEY AUTOINCREMENT,NAME TEXT,SURNAME TEXT,MARKS INTEGER)");
    }
    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        db.execSQL("DROP TABLE IF EXISTS "+TABLE_NAME);
        onCreate(db);
    }
}

```

```

    }
    public boolean insertData(String name,String surname,String marks) {
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put(COL_2,name);
        contentValues.put(COL_3,surname);
        contentValues.put(COL_4,marks);
        long result = db.insert(TABLE_NAME,null ,contentValues);
        if(result == -1)
            return false;
        else
            return true;
    }
    public Cursor getAllData() {
        SQLiteDatabase db = this.getWritableDatabase();
        Cursor res = db.rawQuery("select * from "+TABLE_NAME,null);
        return res;
    }
    public boolean updateData(String id,String name,String surname,String marks) {
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put(COL_1,id);
        contentValues.put(COL_2,name);
        contentValues.put(COL_3,surname);
        contentValues.put(COL_4,marks);
        db.update(TABLE_NAME, contentValues, "ID = ?",new String[] { id });
        return true;
    }
    public Integer deleteData (String id) {
        SQLiteDatabase db = this.getWritableDatabase();
        return db.delete(TABLE_NAME, "ID = ?",new String[] {id});
    }
}

```

Output:

9:10

Insert Data

Name
Mohit

Surname
Mishra

Marks
95.99

ADD DATA

VIEW ALL

9:11

Insert Data

Data

Id :1
Name :Mohit
Surname :Mishra
Marks :95.99

Id :2
Name :Lalit
Surname :Maurya
Marks :98.99

VIEW ALL