Data Base

```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"
android:orientation="vertical"
android:background="@drawable/all"
tools:context=".MainActivity">
<TextView
android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Registration!"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.434"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.125" />
<EditText
android:id="@+id/id"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="text"
android:hint="Id"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.417"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.204" />
<EditText
android:id="@+id/name"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="text"
android:hint="Name"
app:layout_constraintBottom_toBottomOf="parent"
```

```xml
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.417"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.317" />
<EditText
    android:id="@+id/addr"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="text"
    android:hint="Address"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.417"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.434" />

<Button
    android:id="@+id/b1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Insert"
    android:onClick="insert"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.107"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.549"
    />
<Button
    android:id="@+id/b2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Update"
    android:onClick="update"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.848"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.549" />
```

```xml
<Button
android:id="@+id/b3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Delete"
android:onClick="delete"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.107"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.682" />
<Button
android:id="@+id/b4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="View"
android:onClick="view"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.848"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.682" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

DBHelper

```java
package com.example.database;
import android.content.Context;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import androidx.annotation.Nullable;
public class DBHelper extends SQLiteOpenHelper {
public DBHelper(@Nullable Context context) {
super(context,"student.db", null, 1);
}

@Override
public void onCreate(SQLiteDatabase sqLiteDatabase) {
sqLiteDatabase.execSQL("create table tbl_std(id int,name varchar(10),address varchar(10))");
}
@Override
```

```java
    public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {
    }
}
```

Java

```java
package com.example.database;

import androidx.appcompat.app.AppCompatActivity;

import android.content.ContentValues;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    EditText ed1,ed2,ed3;
    DBHelper helper=new DBHelper(this);
    SQLiteDatabase db;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        db=helper.getReadableDatabase();
        ed1=findViewById(R.id.id);
        ed2=findViewById(R.id.name);
        ed3=findViewById(R.id.addr);
    }
    public void insert(View view) {
        String id=ed1.getText().toString();
        String name=ed2.getText().toString();
        String add=ed3.getText().toString();
        ContentValues data1=new ContentValues();
        data1.put("id",id);
        data1.put("name",name);
        data1.put("address",add);
        db.insert("tbl_std",null,data1);
        Toast.makeText(this, "Insterted...........", Toast.LENGTH_SHORT).show();
    }
    public void update(View view) {
```

```java
String id=ed1.getText().toString();
String name=ed2.getText().toString();
String add=ed3.getText().toString();
ContentValues data1=new ContentValues();
data1.put("id",id);
data1.put("name",name);
data1.put("address",add);
db.update("tbl_std",data1,"id="+id,null);
Toast.makeText(this, "Updated.........", Toast.LENGTH_SHORT).show();
}
public void view(View view) {
StringBuffer buffer=new StringBuffer();
Cursor c=db.rawQuery("select * from tbl_std",null);
while(c.moveToNext())
{
buffer.append("ID"+c.getString(0)+"\t");
buffer.append("Name"+c.getString(1)+"\t");
buffer.append("Address"+c.getString(2)+"\t");
}
Toast.makeText(this, buffer.toString(), Toast.LENGTH_LONG).show();
}
public void delete(View view) {
String id=ed1.getText().toString();
db.delete("tbl_std","id="+id,null);
Toast.makeText(this, "Deleted…….", Toast.LENGTH_SHORT).show();
}
}
```

Spinner

```java
package com.example.spinner;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    Spinner spinner;
    String[] select={"select one","apple","orange","mango","lemon","grapes","watermelon"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        spinner=findViewById(R.id.spinner);
        ArrayAdapter<String> aa=new
ArrayAdapter<>(this,android.R.layout.simple_list_item_1,select);
        aa.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        spinner.setAdapter(aa);

        spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                if(i !=0)
                {
                    Toast.makeText(getApplicationContext(),"you selected "+select[i],
Toast.LENGTH_SHORT).show();
                }
            }
            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {

            }
        });
    }
}
```

ACTIVITY.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <Spinner
        android:id="@+id/spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
</RelativeLayout>
```

Navigationbar

```java
package com.example.navigationbar;
import androidx.annotation.NonNull;
import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
import androidx.drawerlayout.widget.DrawerLayout;
import android.os.Bundle;
import android.view.MenuItem;
public class MainActivity extends AppCompatActivity {
    DrawerLayout drawerLayout;
    ActionBarDrawerToggle actionBarDrawerToggle;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        drawerLayout = findViewById(R.id.drawerLayout);
        actionBarDrawerToggle = new ActionBarDrawerToggle(this, drawerLayout, R.string.nav_home,
R.string.nav_gallery);
        drawerLayout.addDrawerListener(actionBarDrawerToggle);
        actionBarDrawerToggle.syncState();
        Toolbar toolbar = findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);
        getSupportActionBar().setDisplayHomeAsUpEnabled(true);
getSupportActionBar().setHomeAsUpIndicator(R.drawable.ic_baseline_ac_unit_24);
    }
    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        if (actionBarDrawerToggle.onOptionsItemSelected(item)) {
            return true;
        }
        return super.onOptionsItemSelected(item);
    }
}


<resources>
    <string name="app_name">NAVIGATION</string>
    <string name="nav_home">Home</string>
    <string name="nav_gallery">Gallery</string>
    <string name="nav_slideshow">Slideshow</string>
    <string name="home">Home</string>
    <string name="gallery">Gallery</string>
    <string name="slideshow">Slideshow</string>
```

```xml
    </resources>
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <group android:checkableBehavior="single">
        <item
            android:id="@+id/nav_home"
            android:title="@string/home"
            android:icon="@drawable/ic_launcher_foreground"/>
        <item
            android:id="@+id/nav_gallery"
            android:icon="@drawable/ic_baseline_ac_unit_24"
            android:title="@string/gallery" />
        <item
            android:id="@+id/nav_slideshow"
            android:icon="@drawable/ic_baseline_adb_24"
            android:title="@string/slideshow" />
    </group>
</menu>
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
    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"
    android:id="@+id/drawerLayout"
    tools:context=".MainActivity">

    <androidx.appcompat.widget.Toolbar
        android:id="@+id/toolbar"
        android:layout_width="match_parent"
        android:layout_height="?attr/actionBarSize"
        app:popupTheme="@style/ThemeOverlay.AppCompat.Light"
        />
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="horizontal">
    </LinearLayout>
```

```xml
    <com.google.android.material.navigation.NavigationView
        android:id="@+id/nav_view"
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:layout_gravity="start"
        app:menu="@menu/navigation_menu" />
</androidx.drawerlayout.widget.DrawerLayout>
```