**ACTIVITY CYCLE**

**package com.example.demoapp;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 }  
 protected void onStop(){  
 super.onStop();  
 Toast.*makeText*(getApplicationContext(),"App stoped",Toast.*LENGTH\_SHORT*).show();  
 }  
 protected void onStart()  
 {  
 super.onStart();  
 Toast.*makeText*(getApplicationContext(),"App started",Toast.*LENGTH\_SHORT*).show();  
 }  
 protected void onRestart(){  
 super.onRestart();  
 Toast.*makeText*(getApplicationContext(),"App restart",Toast.*LENGTH\_SHORT*).show();  
 }  
 protected void onResume()  
 {  
 super.onResume();  
 Toast.*makeText*(getApplicationContext(),"App resume",Toast.*LENGTH\_SHORT*).show();  
 }  
 protected void onPause(){  
 super.onPause();  
 Toast.*makeText*(getApplicationContext(),"App pausss",Toast.*LENGTH\_SHORT*).show();  
 }  
 protected void onDestroy()  
 {  
 super.onDestroy();  
 Toast.*makeText*(getApplicationContext(),"App destrouyy",Toast.*LENGTH\_SHORT*).show();  
 }  
}**

**INTENT**

**MAIN 1**

**package com.example.activitynav;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 Button bt;  
 bt = (Button) findViewById(R.id.*button*);  
 EditText a,b;  
 TextView c;  
 a = (EditText) findViewById(R.id.*num1*);  
 b = (EditText) findViewById(R.id.*num2*);  
 c = (TextView) findViewById(R.id.*result*);  
 Intent it = new Intent(this,MainActivity2.class);  
 bt.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 double num1 = Double.*parseDouble*(a.getText().toString());  
 double num2 = Double.*parseDouble*(b.getText().toString());  
 double sum = num1 + num2;  
 c.setText(Double.*toString*(sum));  
 Bundle bundle = new Bundle();  
 bundle.putString("key", String.*valueOf*(sum));  
 it.putExtras(bundle);  
 startActivity(it);  
  
  
 }  
 });  
 }}**

**MAIN2**

**package com.example.activitynav;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.TextView;  
  
public class MainActivity2 extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main2*);  
 TextView num3 = (TextView) findViewById(R.id.*resultantsum*);  
 Bundle bundle = getIntent().getExtras();  
 num3.setText(bundle.getString("key", "No value from the MainActivity"));  
 }  
}**

**XML1**

***<?*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"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/num1"  
 android:layout\_width="138dp"  
 android:layout\_height="51dp"  
 android:backgroundTint="#00BCD4"  
 android:ems="10"  
 android:hint="Num1"  
 android:inputType="number"  
 android:textColor="#E91E63"  
 android:textColorHint="#673AB7"  
 android:textSize="24sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.153"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.232" />  
  
 <EditText  
 android:id="@+id/num2"  
 android:layout\_width="160dp"  
 android:layout\_height="59dp"  
 android:backgroundTint="#00BCD4"  
 android:ems="10"  
 android:hint="Num2"  
 android:inputType="number"  
 android:textColor="#E91E63"  
 android:textColorHint="#673AB7"  
 android:textSize="24sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.846"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.223" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="#E91E63"  
 android:text="Add"  
 android:textSize="24sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.467"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.375" />  
  
 <TextView  
 android:id="@+id/result"  
 android:layout\_width="86dp"  
 android:layout\_height="62dp"  
 android:hint="Sum"  
 android:textAlignment="center"  
 android:textColor="#673AB7"  
 android:textColorHint="#673AB7"  
 android:textSize="24sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.47"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.535" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>**

**XML2**

***<?*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"  
 tools:context=".MainActivity2">  
  
 <TextView  
 android:id="@+id/resultantsum"  
 android:layout\_width="154dp"  
 android:layout\_height="61dp"  
 android:hint="Sum"  
 android:textColor="#E91E63"  
 android:textColorHint="#673AB7"  
 android:textSize="34sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.41" />  
</androidx.constraintlayout.widget.ConstraintLayout>**

**CALCULATOR**

**package com.example.calculator;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
  
 Button b1,b2,b3,b4,b5,b6,b7,b8,b9,b0,add,sub,mul,eq,div,clr;  
 EditText input;  
 boolean fadd = false, fsub = false, fmul = false, fdiv = false;  
 Float op1,op2,ans;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 add = (Button) findViewById(R.id.*buttonadd*);  
 b3 = (Button) findViewById(R.id.*button3*);  
 b2 = (Button) findViewById(R.id.*button2*);  
 b1 = (Button) findViewById(R.id.*button1*);  
 sub = (Button) findViewById(R.id.*buttonsub*);  
 b6 = (Button) findViewById(R.id.*button6*);  
 b5 = (Button) findViewById(R.id.*button5*);  
 b4 = (Button) findViewById(R.id.*button4*);  
 mul = (Button) findViewById(R.id.*buttonmul*);  
 b9 = (Button) findViewById(R.id.*button9*);  
 b8 = (Button) findViewById(R.id.*button8*);  
 b7 = (Button) findViewById(R.id.*button7*);  
 eq = (Button) findViewById(R.id.*buttoneq*);  
 div = (Button) findViewById(R.id.*buttondiv*);  
 b0 = (Button) findViewById(R.id.*button0*);  
 clr = (Button) findViewById(R.id.*buttonclr*);  
 input = (EditText) findViewById(R.id.*input*);  
  
 b0.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "0");  
 }  
 });  
  
 b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "1");  
 }  
 });  
  
 b0.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "0");  
 }  
 });  
  
 b2.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "2");  
 }  
 });  
  
 b3.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "3");  
 }  
 });  
  
 b4.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "4");  
 }  
 });  
  
 b5.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "5");  
 }  
 });  
  
 b6.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "6");  
 }  
 });  
  
 b7.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "7");  
 }  
 });  
  
 b8.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "8");  
 }  
 });  
  
 b9.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText(input.getText() + "9");  
 }  
 });  
 clr.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 input.setText("");  
 }  
 });  
  
 add.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 op1 = Float.*parseFloat*(input.getText() + "");  
 fadd = true;  
 input.setText("");  
 }  
 });  
  
 sub.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 op1 = Float.*parseFloat*(input.getText() + "");  
 fsub = true;  
 input.setText("");  
 }  
 });  
  
 mul.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 op1 = Float.*parseFloat*(input.getText() + "");  
 fmul = true;  
 input.setText("");  
 }  
 });  
  
 div.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 op1 = Float.*parseFloat*(input.getText() + "");  
 fdiv = true;  
 input.setText("");  
 }  
 });  
  
 eq.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 op2 = Float.*parseFloat*(input.getText() + "");  
 if(fadd == true)  
 {  
 ans = op1 + op2;  
 fadd = false;  
 }  
 else if(fsub == true)  
 {  
 ans = op1 - op2;  
 fsub = false;  
 }  
 else if(fmul == true)  
 {  
 ans = op1 \* op2;  
 fmul = false;  
 }  
 else if(fdiv == true)  
 {  
 ans = op1 / op2;  
 fdiv = false;  
 }  
  
 input.setText(Float.*toString*(ans));  
 }  
 });  
 }  
}**

***<?*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"  
 tools:context=".MainActivity">  
  
 <TableLayout  
 android:id="@+id/tableLayout"  
 android:layout\_width="414dp"  
 android:layout\_height="327dp"  
 android:layout\_marginStart="5dp"  
 android:layout\_marginTop="400dp"  
 android:layout\_marginBottom="63dp"  
 android:background="#8A5BDC"  
 android:padding="0dp"  
 android:paddingStart="0dp"  
 android:paddingTop="0dp"  
 android:paddingEnd="0dp"  
 android:paddingRight="0dp"  
 android:paddingBottom="0dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <TableRow  
 android:id="@+id/row1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:backgroundTint="#EAE0E0"  
 android:paddingTop="10sp"  
 android:visibility="visible"  
 tools:visibility="visible">  
  
 <Button  
 android:id="@+id/button1"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="1"  
 android:textSize="35sp"  
 app:iconTint="#D14444"  
 app:rippleColor="#B12F2F" />  
  
 <Button  
 android:id="@+id/button2"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="2"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/button3"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="3"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/buttonadd"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="125dp"  
 android:layout\_height="82dp"  
 android:backgroundTint="#9616AC"  
 android:paddingTop="15sp"  
 android:text="+"  
 android:textSize="35sp" />  
 </TableRow>  
  
 <TableRow  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content">  
  
 <Button  
 android:id="@+id/button4"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="4"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/button5"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="5"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/button6"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="6"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/buttonsub"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:backgroundTint="#9616AC"  
 android:text="-"  
 android:textSize="35sp" />  
 </TableRow>  
  
 <TableRow  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <Button  
 android:id="@+id/button7"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="7"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/button8"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="8"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/button9"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="9"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/buttonmul"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:backgroundTint="#9616AC"  
 android:text="\*"  
 android:textSize="35sp" />  
 </TableRow>  
  
 <TableRow  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <Button  
 android:id="@+id/buttonclr"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:backgroundTint="#9616AC"  
 android:text="C"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/button0"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:text="0"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/buttondiv"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:backgroundTint="#9616AC"  
 android:text="/"  
 android:textSize="35sp" />  
  
 <Button  
 android:id="@+id/buttoneq"  
 style="?android:attr/buttonBarButtonStyle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="82dp"  
 android:backgroundTint="#9616AC"  
 android:text="="  
 android:textSize="35sp" />  
 </TableRow>  
 </TableLayout>  
  
 <EditText  
 android:id="@+id/input"  
 android:layout\_width="410dp"  
 android:layout\_height="367dp"  
 android:layout\_marginEnd="1dp"  
 android:background="#430EA3"  
 android:backgroundTint="#301D51"  
 android:ems="10"  
 android:foregroundTint="#801717"  
 android:gravity="bottom|right"  
 android:inputType="number|text|numberDecimal"  
 android:paddingRight="12sp"  
 android:shadowColor="#881A1A"  
 android:textColor="#FFFFFF"  
 android:textSize="60sp"  
 app:layout\_constraintBottom\_toTopOf="@+id/tableLayout"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="SpeakableTextPresentCheck" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>**

**SQL**

**MAIN**

**package com.example.sqlapp;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 EditText name, contact, age;  
 Button insert, update, delete, view;  
 DBHelper DB;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 name=findViewById(R.id.*name*);  
 contact=findViewById(R.id.*contact*);  
 age=findViewById(R.id.*age*);  
 insert=findViewById(R.id.*btnInsert*);  
 update=findViewById(R.id.*btnUpdate*);  
 delete=findViewById(R.id.*btnDelete*);  
 view=findViewById(R.id.*btnView*);  
 DB = new DBHelper(this);  
 insert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String nameTXT = name.getText().toString();  
 String contactTXT = contact.getText().toString();  
 String ageTXT = age.getText().toString();  
 boolean qryStatus = DB.insertData(nameTXT,contactTXT,ageTXT);  
 if (qryStatus==true)  
 Toast.*makeText*(MainActivity.this, "New Record Created", Toast.*LENGTH\_SHORT*).show();  
 else  
 Toast.*makeText*(MainActivity.this, "New Record Creation Failed", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 update.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String nameTXT = name.getText().toString();  
 String contactTXT = contact.getText().toString();  
 String ageTXT = age.getText().toString();  
 boolean qryStatus = DB.updateData(nameTXT,contactTXT,ageTXT);  
 if (qryStatus==true)  
 Toast.*makeText*(MainActivity.this, "Record Updated", Toast.*LENGTH\_SHORT*).show();  
 else  
 Toast.*makeText*(MainActivity.this, "Record Updation Failed", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 delete.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {String nameTXT = name.getText().toString();  
 boolean qryStatus = DB.deleteData(nameTXT);  
 if (qryStatus==true)  
 Toast.*makeText*(MainActivity.this, "Record Deleted", Toast.*LENGTH\_SHORT*).show();  
 else  
 Toast.*makeText*(MainActivity.this, "Record Deletion Failed", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 view.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Cursor res = DB.viewData();  
 if(res.getCount()==0)  
 Toast.*makeText*(MainActivity.this, "No Record Exist", Toast.*LENGTH\_SHORT*).show();  
 else {  
 StringBuffer buffer = new StringBuffer();  
 while(res.moveToNext()){  
 buffer.append("Name :"+res.getString(0)+"\n");  
 buffer.append("Contact :"+res.getString(1)+"\n");  
 buffer.append("Age :"+res.getString(2)+"\n");  
 }  
 AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this);  
 builder.setCancelable(true);  
 builder.setTitle("User Data");  
 builder.setMessage(buffer.toString());  
 builder.show();  
 }  
 }  
 });  
  
 }  
}**

**DBHELPER**

**package com.example.sqlapp;  
  
import android.content.ContentValues;  
import android.content.Context;  
import android.database.Cursor;  
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, "Userdata.db", null, 1);  
 }  
 @Override  
 public void onCreate(SQLiteDatabase db) {  
 db.execSQL("create Table Userdetails(name TEXT primary key, contact TEXT, age TEXT)");  
 }  
 @Override  
 public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {  
 db.execSQL("drop Table if exists Userdetails");  
 }  
 public boolean insertData(String name,String contact,String age){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues contentValues = new ContentValues();  
 contentValues.put("name",name);  
 contentValues.put("contact",contact);  
 contentValues.put("age",age);  
 long result=db.insert("Userdetails", null, contentValues);  
 if(result==-1)  
 return false;  
 else  
 return true;  
 }  
 public boolean updateData(String name,String contact,String age){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues contentValues = new ContentValues();  
 contentValues.put("contact",contact);  
 contentValues.put("age",age);  
 Cursor cursor = db.rawQuery("Select \* from Userdetails where name = ?", new String[] {name});  
 if(cursor.getCount() > 0) {  
 long result = db.update("Userdetails", contentValues, "name=?", new String[] {name});  
 if (result == -1)  
 return false;  
 else  
 return true;  
 } else {  
 return false;  
 }  
 }  
 public boolean deleteData(String name){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues contentValues = new ContentValues();  
 Cursor cursor = db.rawQuery("Select \* from Userdetails where name = ?", new String[] {name});  
 if(cursor.getCount() > 0) {  
 long result = db.delete("Userdetails", "name=?", new String[] {name});  
 if (result == -1)  
 return false;  
 else  
 return true;  
 } else {  
 return false;  
 }  
 }  
 public Cursor viewData () {  
 SQLiteDatabase db = this.getWritableDatabase();  
 Cursor cursor = db.rawQuery("Select \* from Userdetails", null);  
 return cursor;  
 }  
}**

**XML**

***<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout 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:background="#EFFFFD"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/tv1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginRight="10dp"  
  
 android:fontFamily="sans-serif"  
 android:text="Enter the details below:"  
 android:textColor="#090909"  
 android:textStyle="bold"  
 android:textSize="30sp" />  
  
 <EditText  
 android:id="@+id/name"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/tv1"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginTop="15dp"  
 android:layout\_marginRight="10dp"  
 android:hint="Name"  
 android:inputType="textPersonName"  
 android:textSize="24dp" />  
  
 <EditText  
 android:id="@+id/contact"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/name"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginTop="15dp"  
 android:layout\_marginRight="10dp"  
 android:hint="Contact"  
  
 android:inputType="number"  
 android:textSize="24dp" />  
  
 <EditText  
 android:id="@+id/age"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/contact"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginRight="10dp"  
 android:hint="Age"  
  
 android:inputType="number"  
 android:textSize="24dp" />  
  
 <Button  
 android:id="@+id/btnInsert"  
 android:layout\_width="200dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/age"  
 android:layout\_centerInParent="true"  
 android:layout\_marginTop="30dp"  
 android:backgroundTint="#2196F3"  
 android:text="Insert"  
 android:textSize="24dp" />  
  
 <Button  
 android:id="@+id/btnUpdate"  
 android:layout\_width="200dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/btnInsert"  
  
 android:layout\_centerInParent="true"  
 android:layout\_marginTop="30dp"  
 android:backgroundTint="#00BCD4"  
 android:text="Update"  
 android:textSize="24dp" />  
  
 <Button  
 android:id="@+id/btnDelete"  
 android:layout\_width="200dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/btnUpdate"  
 android:layout\_centerInParent="true"  
 android:layout\_marginTop="30dp"  
 android:backgroundTint="#E91E63"  
 android:text="Delete"  
 android:textSize="24dp" />  
  
 <Button  
 android:id="@+id/btnView"  
 android:layout\_width="200dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/btnDelete"  
 android:layout\_centerInParent="true"  
 android:layout\_marginTop="30dp"  
 android:backgroundTint="#009688"  
 android:text="View"  
 android:textSize="24dp" />  
</RelativeLayout>**

**MEDIA PLAYER**

**package com.example.media;  
  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.media.Image;  
import android.media.MediaPlayer;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.ImageButton;  
  
public class MainActivity extends AppCompatActivity {  
 MediaPlayer player, newplayer;  
  
 MediaPlayer createMedia()  
 {  
 newplayer = MediaPlayer.create(this, R.raw.bts);  
 return(newplayer);  
 }  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
 int shift = 10000;  
 ImageButton play = (ImageButton) findViewById(R.id.playButton);  
 ImageButton pause = (ImageButton) findViewById(R.id.pauseButton);  
 ImageButton stop = (ImageButton) findViewById(R.id.stopButton);  
 ImageButton revert = (ImageButton) findViewById(R.id.restartButton);  
 ImageButton forward = (ImageButton) findViewById(R.id.forwardButton);  
 ImageButton rewind = (ImageButton) findViewById(R.id.rewindButton);  
 EditText title = (EditText) findViewById(R.id.SongTitle);  
 player = createMedia();  
  
 play.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 title.setText("BTS");  
 player.start();  
 }  
 });  
  
 pause.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 player.pause();  
 }  
 });  
  
 stop.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 *//player.pause();  
 //player.seekTo(0);* player.stop();  
 player = createMedia();  
 }  
 });  
  
 revert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 *//player.seekTo(0);  
 //player.start();* player.reset();  
 player = createMedia();  
 player.start();  
 }  
 });  
  
 forward.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 int curr = player.getCurrentPosition();  
 int dur = player.getDuration();  
  
 if((curr + shift) <= dur)  
 {  
 player.seekTo(curr+shift);  
 }  
 }  
 });  
  
 rewind.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 int curr = player.getCurrentPosition();  
 int dur = player.getDuration();  
  
 if((curr - shift) >= 0)  
 {  
 player.seekTo(curr-shift);  
 }  
 }  
 });  
  
 }  
}**

***<?*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"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/SongTitle"  
 android:layout\_width="271dp"  
 android:layout\_height="105dp"  
 android:layout\_marginTop="139dp"  
 android:layout\_marginBottom="89dp"  
 android:ems="10"  
 android:gravity="center"  
 android:inputType="textPersonName"  
 android:text="Title"  
 android:textSize="50sp"  
 app:layout\_constraintBottom\_toTopOf="@+id/playButton"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ImageButton  
 android:id="@+id/playButton"  
 android:layout\_width="65dp"  
 android:layout\_height="65dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@android:drawable/ic\_media\_play" />  
  
 <ImageButton  
 android:id="@+id/pauseButton"  
 android:layout\_width="65dp"  
 android:layout\_height="65dp"  
 android:layout\_marginStart="45dp"  
 android:layout\_marginEnd="63dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toStartOf="@+id/playButton"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@android:drawable/ic\_media\_pause" />  
  
 <ImageButton  
 android:id="@+id/forwardButton"  
 android:layout\_width="65dp"  
 android:layout\_height="65dp"  
 android:layout\_marginStart="61dp"  
 android:layout\_marginTop="82dp"  
 android:layout\_marginEnd="47dp"  
 android:layout\_marginBottom="186dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toEndOf="@+id/stopButton"  
 app:layout\_constraintTop\_toBottomOf="@+id/restartButton"  
 app:srcCompat="@android:drawable/ic\_media\_ff" />  
  
 <ImageButton  
 android:id="@+id/rewindButton"  
 android:layout\_width="65dp"  
 android:layout\_height="65dp"  
 android:layout\_marginTop="81dp"  
 android:layout\_marginBottom="186dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.126"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/pauseButton"  
 app:srcCompat="@android:drawable/ic\_media\_rew" />  
  
 <ImageButton  
 android:id="@+id/restartButton"  
 android:layout\_width="65dp"  
 android:layout\_height="65dp"  
 android:layout\_marginStart="61dp"  
 android:layout\_marginEnd="47dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toEndOf="@+id/playButton"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@android:drawable/ic\_menu\_revert" />  
  
 <ImageButton  
 android:id="@+id/stopButton"  
 android:layout\_width="65dp"  
 android:layout\_height="65dp"  
 android:layout\_marginTop="82dp"  
 android:layout\_marginBottom="186dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/playButton"  
 app:srcCompat="@android:drawable/ic\_delete" />  
</androidx.constraintlayout.widget.ConstraintLayout>**