**ACTIVITY BASED ASSESMENT(ABA) EXCERCISES**

**Program-1: Create an application to design a Visiting Card. The Visiting card should have a company logo at the top right corner. The company name should be displayed in Capital letters, aligned to the center. Information like the name of the employee, job title, phone number, address, email, fax and the website address is to be displayed. Insert a horizontal line between the job title and the phone number.**

1. Firstly Create an Application by Name “VisitingCardApp”
2. Go to xml code of design change the layout to “RelativeLayout”
3. Add TextView component change the following properties:

* Size: 38dp
* Text: VVCE
* Align left top

1. Add ImageView to design and in type choose “IC\_LAUNCHER\_FOREGROUND”

* Download the logo & copy the same in res->drawable folder
* In xml code of imageview change srcCompat=”@drawable/logo”
* Align right top

1. Add View component & change the following properties:

* Height: 4dp
* Background: “#4444” (black color)

1. Add TextView component change the following properties:

* Size: 20dp
* Text: Nithin Kumar
* Style: Bold
* Align center

1. Add TextView component change the following properties:

* Size: 20dp
* Text: Assistant Professor-CSE
* Align center

1. Add TextView component change the following properties:

* Size: 20dp
* Text: Address-Kannada Sahithya Parishath Road, Mysuru-02
* Align: center

1. Add TextView component change the following properties:

* Size: 20dp
* Text: Email-nithingowda021@vvce.ac.in
* Align: center

1. Add TextView component change the following properties:

* Size: 20dp
* Text: Phone-8050462225

**XML-CODE**

*<?*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"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="17dp"  
 android:layout\_marginLeft="17dp"  
 android:layout\_marginTop="17dp"  
 android:layout\_marginEnd="244dp"  
 android:layout\_marginRight="244dp"  
 android:layout\_marginBottom="486dp"  
 android:text="VVCE"  
 android:textSize="38dp" />  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="231dp"  
 android:layout\_height="174dp"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="-14dp"  
 android:layout\_marginRight="-14dp"  
 android:layout\_marginBottom="481dp"  
 app:srcCompat="@drawable/logo" />  
  
 <View  
 android:id="@+id/view"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="4dp"  
 android:layout\_alignParentBottom="true"  
 android:background="#4444"  
 android:layout\_marginBottom="466dp" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="117dp"  
 android:layout\_marginRight="117dp"  
 android:layout\_marginBottom="394dp"  
 android:text="Nithin Kumar"  
 android:textSize="30dp"  
 android:textStyle="bold" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="64dp"  
 android:layout\_marginRight="64dp"  
 android:layout\_marginBottom="343dp"  
 android:text="Assistant Professor-CSE"  
 android:textSize="25dp" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="127dp"  
 android:layout\_marginRight="127dp"  
 android:layout\_marginBottom="294dp"  
 android:text="Ph No: 8050462225"  
 android:textSize="20dp" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="10dp"  
 android:layout\_marginRight="10dp"  
 android:layout\_marginBottom="229dp"  
 android:text="Kannada Sahitya Parishath Road Gokulam 3rd Stage Mysuru-02"  
 android:textSize="20dp" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="44dp"  
 android:layout\_marginRight="44dp"  
 android:layout\_marginBottom="189dp"  
 android:text="Email: nithingowda021@vvce.ac.in"  
 android:textSize="20dp" />  
</RelativeLayout>

**JAVA-CODE**

import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
public class MainActivity extends AppCompatActivity {  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
 }  
}

**OUTPUT:**

**Program-2: Develop an Android application using controls like Button, TextView, EditText for designing a calculator having basic functionality like Addition, Subtraction, Multiplication, and Division.**

1. Firstly Create an Application by Name “SimpleCalci”
2. Go to xml code of design change the layout to “RelativeLayout”
3. Add TextView component & change the following properties:

* Size: 38dp
* Text: Simple Calci
* Center-Align

1. Add PlainText(EditText) component & change the following properties in XML Code:

* Text: “”
* Hint: “Enter the first number”
* id: “@+id/editText1”

1. Add PlainText(EditText) component & change the following properties in XML Code:

* Text: “”
* Hint: “Enter the second number”
* id: “@+id/editText2”

1. Add TextView component to display result & change the following properties:

* Size: 40dp
* Text: “0”
* Center-Align
* id: “@+id/textView1”

1. Add 4 Buttons & rename the four buttons “Add”, “Sub”,”Mul” and “div” with following addition:

* Onclick: “doAdd”(Add Button)
* Onclick: “doSub”(Sub Button)
* Onclick: “doMul”(Mul Button)
* Onclick: “doDiv”(Div Button)

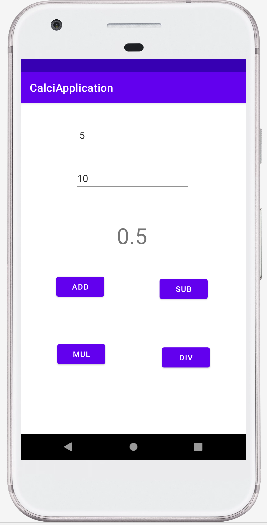
**XML-CODE:**

<?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"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="98dp"  
 android:layout\_marginBottom="653dp"  
 android:text="SIMPLE CALCI"  
 android:textSize="38dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.042" />  
  
 <EditText  
 android:id="@+id/editText1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="115dp"  
 android:layout\_marginBottom="547dp"  
 android:ems="10"  
 android:hint="Enter the First Number"  
 android:inputType="textPersonName"  
 android:text="" />  
  
 <EditText  
 android:id="@+id/editText2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="111dp"  
 android:layout\_marginBottom="455dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:hint="Enter the Second Number"  
 android:text="" />  
  
 <TextView  
 android:id="@+id/textView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="203dp"  
 android:layout\_marginBottom="350dp"  
 android:text="0"  
 android:textSize="40dp" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="274dp"  
 android:layout\_marginBottom="237dp"  
 android:onClick="doAdd"  
 android:text="ADD" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="68dp"  
 android:layout\_marginBottom="233dp"  
 android:onClick="doSub"  
 android:text="SUB" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="277dp"  
 android:layout\_marginBottom="115dp"  
 android:onClick="doMul"  
 android:text="MUL" />  
  
 <Button  
 android:id="@+id/button4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="63dp"  
 android:layout\_marginBottom="104dp"  
 android:onClick="doDiv"  
 android:text="DIV" />  
  
</RelativeLayout>

**JAVA-CODE:**

import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
public class MainActivity extends AppCompatActivity {  
 EditText e1,e2;  
 TextView tv1;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
 e1 = (EditText)findViewById(R.id.editText1);  
 e2 = (EditText)findViewById(R.id.editText2);  
 tv1 = (TextView)findViewById(R.id.textView1);  
 }  
 public void doAdd(View V){  
 int a1 = Integer.parseInt(e1.getText().toString());  
 int a2 = Integer.parseInt(e2.getText().toString());  
 int result= a1+a2;  
 tv1.setText(""+result);  
 }  
 public void doSub(View V){  
 int a1 = Integer.parseInt(e1.getText().toString());  
 int a2 = Integer.parseInt(e2.getText().toString());  
 int result= a1-a2;  
 tv1.setText(""+result);  
 }  
 public void doMul(View V){  
 int a1 = Integer.parseInt(e1.getText().toString());  
 int a2 = Integer.parseInt(e2.getText().toString());  
 int result= a1\*a2;  
 tv1.setText(""+result);  
 }  
 public void doDiv(View V){  
 int a1 = Integer.parseInt(e1.getText().toString());  
 int a2 = Integer.parseInt(e2.getText().toString());  
 float result= a1/a2;  
 tv1.setText(""+result);  
 }  
}

**OUTPUT:**



**Program-3: Develop a simple application with one EditText so that the user can write some text in it. Create a button called “Convert Text to Speech” that converts the user input text into voice.**

1. Firstly Create an Application by Name “TextToSpeech”
2. Go to xml code of design change the layout to “RelativeLayout”
3. Add TextView component & change the following properties:
4. Size: 38dp
5. Text: Text2Speech App
6. Center-Align
7. Add PlainText(EditText) component & change the following properties in XML Code:

* Text: “”
* Hint: “Enter the text to be converted”
* id: “@+id/editText”

1. Add Button component & change the following properties in XML Code:

* Name: Convert
* onClick: convert

**XML-CODE:**

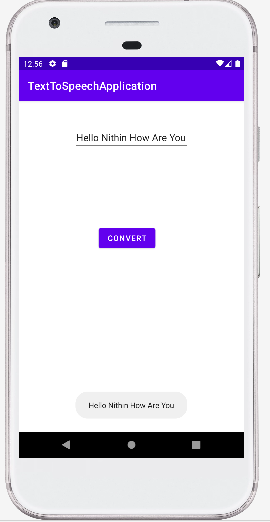
<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="59dp"  
 android:layout\_marginRight="59dp"  
 android:layout\_marginBottom="649dp"  
 android:text="Text2SpeechApp"  
 android:textSize="40dp" />  
  
 <EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="101dp"  
 android:layout\_marginRight="101dp"  
 android:layout\_marginBottom="514dp"  
 android:ems="10"  
 android:hint="Enter the text to be converted"  
 android:inputType="textPersonName"  
 android:text="" />

<Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="162dp"  
 android:onClick="convert"  
 android:layout\_marginRight="162dp"  
 android:layout\_marginBottom="329dp"  
 android:text="Convert" />  
</RelativeLayout>

**JAVA-CODE:**

import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.speech.tts.TextToSpeech;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import java.util.Locale;  
  
public class MainActivity extends AppCompatActivity {  
 TextToSpeech t1;  
 EditText e1;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
 e1 = findViewById(R.id.editText);  
 t1 = new TextToSpeech(getApplicationContext(), new TextToSpeech.OnInitListener() {  
 @Override  
 public void onInit(int status) {  
 if (status!=TextToSpeech.ERROR){  
 t1.setLanguage(Locale.UK);  
 }  
 }  
 });  
 }  
 public void convert(View view){  
 String tospeak = e1.getText().toString();  
 t1.speak(tospeak,TextToSpeech.QUEUE\_FLUSH,null);  
 }  
}

**OUTPUT:**



**Program-4: Create an activity using explicit intents. On pressing the Call button, it must call the VVCE number, on pressing the About button it must show the information of VVCE, on pressing Location button it must the location of VVCE and on pressing the Results button it must take you to VTU results site.**

1) Firstly Create an Application by Name “SimpleCalci”

1. Go to xml code of design change the layout to “RelativeLayout”
2. Add TextView component & change the following properties:

* Size: 38dp
* Text: Explicit Intents
* Center-Align

1. Add 4 Buttons & rename the four buttons “ABOUT”, “CALL”,”RESULT” and “LOCATION” with following addition:

* Onclick: “about”(About Button)
* Onclick: “call”(Call Button)
* Onclick: “result”(Result Button)
* Onclick: “location”(Location Button)

**XML-CODE:**

<?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"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="98dp"  
 android:layout\_marginBottom="653dp"  
 android:text="EXPLICIT Intents"  
 android:textSize="38dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.042" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="274dp"  
 android:layout\_marginBottom="237dp"  
 android:onClick="about"  
 android:text="ABOUT" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="68dp"  
 android:layout\_marginBottom="233dp"  
 android:onClick="call"  
 android:text="CALL" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="277dp"  
 android:layout\_marginBottom="115dp"  
 android:onClick="location"  
 android:text="LOCATION" />  
  
 <Button  
 android:id="@+id/button4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="63dp"  
 android:layout\_marginBottom="104dp"  
 android:onClick="result"  
 android:text="RESULT" />  
  
</RelativeLayout>

**Java-Code:**

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);

}

public void about(View v)  
 {  
 String url = "vvce.ac.in";  
 Uri u = Uri.parse("http://"+url);  
 Intent i = new Intent(Intent.ACTION\_VIEW,u);  
 startActivity(i);  
 }

public void result(View v)  
 {  
 String url = "results.vtu.ac.in";  
 Uri u = Uri.parse("http://"+url);  
 Intent i = new Intent(Intent.ACTION\_VIEW,u);  
 startActivity(i);  
 }  
 public void location(View v)  
 {  
 String loc = "Vidyavardhaka College of Engineering";  
 Uri l = Uri.parse("geo:?q="+loc);  
 Intent i = new Intent(Intent.ACTION\_VIEW,l);  
 startActivity(i);  
 }  
 public void call(View v)  
 {  
 String num = "0821-4276200";  
 Uri c = Uri.parse("tel:"+num);  
 Intent i = new Intent(Intent.ACTION\_VIEW,c);  
 startActivity(i);  
 }  
}

**Program-5: Design a DBAdapter helper class in java to insert, update, delete and view the contact details of users using 4 Buttons such as “Name”, ”Phone” and “DOB” using SQLite database in android application.**

1) Firstly Create an Application by Name “DBApplication”

1. Go to xml code of design change the layout to “RelativeLayout”
2. Add TextView component & change the following properties:

* Size: 38dp
* Text: DBApplication
* Center-Align

1. Add Three Plain-Text(EditText) for collection of “Name”, ”Contact”, and “DOB” and Rename the same and Change the ID’s in XML file:

* Name EditText: name
* Contact EditText: contact
* DOB EditText: dob

1. Add 4 Buttons & rename the four buttons “INSERT”, “UPDATE”,”DELETE” and “VIEW” with the following ID’s in XML file:

* Insert Button: btnInsert
* Update Button: btnUpdate
* Delete Button: btnDelete
* View Button: btnView

1. Add new java class by name “DBHelper” by following the below hierarchy

Mainactivity.java->new->java class

**XML-CODE:**

<?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"

tools:context=".MainActivity">

<Button

android:id="@+id/btnView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="99dp"

android:layout\_marginBottom="118dp"

android:text="View" />

<Button

android:id="@+id/btnDelete"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="273dp"

android:layout\_marginBottom="120dp"

android:text="Delete" />

<Button

android:id="@+id/btnUpdate"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="104dp"

android:layout\_marginBottom="225dp"

android:text="Update" />

<EditText

android:id="@+id/name"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="136dp"

android:layout\_marginBottom="509dp"

android:ems="10"

android:hint="name"

android:inputType="textPersonName"

android:text="" />

<EditText

android:id="@+id/contact"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="134dp"

android:layout\_marginBottom="426dp"

android:ems="10"

android:hint="contact"

android:inputType="textPersonName"

android:text="" />

<EditText

android:id="@+id/dob"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="135dp"

android:layout\_marginBottom="339dp"

android:ems="10"

android:hint="date of birth"

android:inputType="textPersonName"

android:text="" />

<Button

android:id="@+id/btnInsert"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="273dp"

android:layout\_marginBottom="229dp"

android:text="Insert" />

</RelativeLayout>

**DBHelper.Java (Open New->Java Class and create this class)**

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(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, dob TEXT)");

}

@Override

public void onUpgrade(SQLiteDatabase DB, int oldVersion, int newVersion) {

DB.execSQL("drop Table if exists Userdetails");

}

public boolean insertuserdata(String name, String contact, String dob){

SQLiteDatabase DB=this.getWritableDatabase();

ContentValues contentValues=new ContentValues();

contentValues.put("name",name);

contentValues.put("contact",contact);

contentValues.put("dob",dob);

long result=DB.insert("Userdetails",null,contentValues);

if(result==-1)

{

return false;

}

else

{

return true;

}

}

public boolean updateuserdata(String name, String contact, String dob) {

SQLiteDatabase DB = this.getWritableDatabase();

ContentValues contentValues = new ContentValues();

contentValues.put("contact", contact);

contentValues.put("dob", dob);

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();

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 getdata() {

SQLiteDatabase DB = this.getWritableDatabase();

Cursor cursor = DB.rawQuery("Select \* from Userdetails", null);

return cursor;

}

}

**Mainactivity.Java:**

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,dob;

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);

dob=findViewById(R.id.dob);

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 dobTXT=dob.getText().toString();

Boolean checkinsertdata=DB.insertuserdata(nameTXT,contactTXT,dobTXT);

if (checkinsertdata==true)

Toast.makeText(MainActivity.this,"New Entry Inserted",Toast.LENGTH\_LONG).show();

else

Toast.makeText(MainActivity.this,"New Entry not Inserted",Toast.LENGTH\_LONG).show();

}

});

update.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String nameTXT=name.getText().toString();

String contactTXT=contact.getText().toString();

String dobTXT=dob.getText().toString();

Boolean checkupdatedata=DB.updateuserdata(nameTXT,contactTXT,dobTXT);

if (checkupdatedata==true)

Toast.makeText(MainActivity.this,"Entry Updated",Toast.LENGTH\_LONG).show();

else

Toast.makeText(MainActivity.this,"Entry not Updated",Toast.LENGTH\_LONG).show();

}

});

delete.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String nameTXT=name.getText().toString();

Boolean checkdeletedata=DB.deletedata(nameTXT);

if (checkdeletedata==true)

Toast.makeText(MainActivity.this,"Entry Deleted",Toast.LENGTH\_LONG).show();

else

Toast.makeText(MainActivity.this,"Entry not Deleted",Toast.LENGTH\_LONG).show();

}

});

view.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Cursor res=DB.getdata();

if(res.getCount()==0)

{

Toast.makeText(MainActivity.this,"No entry found",Toast.LENGTH\_LONG).show();

return;

}

StringBuffer buffer=new StringBuffer();

while (res.moveToNext()){

buffer.append("Name: "+res.getString(0)+"\n");

buffer.append("Contact: "+res.getString(1)+"\n");

buffer.append("DOB: "+res.getString(2)+"\n\n");

}

AlertDialog.Builder builder=new AlertDialog.Builder(MainActivity.this);

builder.setCancelable(true);

builder.setTitle("User Enteries");

builder.setMessage(buffer.toString());

builder.show();

}

});

}

}