8 Create an activity like a phone dialer with CALL and SAVE buttons. On pressing the CALL button, it must call the phone number and on pressing the SAVE button it must save the number to the phone contacts.

**XML Part– activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout 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:layout\_marginTop="150dp"

tools:context=".MainActivity">

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="CALL and SAVE APPLICATION"

android:textSize="30sp"

android:textAlignment="center"

android:textColor="@color/design\_default\_color\_primary\_dark"

/>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<EditText

android:layout\_width="300dp"

android:layout\_height="wrap\_content"

android:id="@+id/num"

android:hint="Enter Number To Dial/SAVE"

android:textAlignment="center"

android:textSize="20sp"

android:textColor="@color/design\_default\_color\_error"/>

<Button

android:layout\_width="100dp"

android:layout\_height="wrap\_content"

android:id="@+id/del"

android:text="DEL"

android:textAlignment="center"

android:onClick="delete"/>

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:orientation="horizontal">

<Button

android:id="@+id/three"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="three"

android:text="3" />

<Button

android:id="@+id/one"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="one"

android:text="1" />

<Button

android:id="@+id/two"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="two"

android:text="2" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:layout\_gravity="center">

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/four"

android:text="4"

android:onClick="four"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/five"

android:text="5"

android:onClick="five"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/six"

android:text="6"

android:onClick="six"/>

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:layout\_gravity="center">

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/seven"

android:text="7"

android:onClick="seven"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/eight"

android:text="8"

android:onClick="eight"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/nine"

android:text="9"

android:onClick="nine"/>

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:layout\_gravity="center">

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/star"

android:text="\*"

android:onClick="star"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/zero"

android:text="0"

android:onClick="zero"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/hash"

android:text="#"

android:onClick="hash"/>

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:layout\_gravity="center">

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/call"

android:text="CALL"

android:onClick="call"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/save"

android:text="SAVE"

android:onClick="save"/>

</LinearLayout>

</LinearLayout>

**Java Code – MainActivity.java**

package com.example.l8;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.os.VibrationEffect;

import android.provider.ContactsContract;

import android.view.View;

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

EditText number;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

number=findViewById(R.id.num);

}

public void one(View v)

{

number.append("1");

}

public void two(View v)

{

number.append("2");

}

public void three(View v)

{

number.append("3");

}

public void four(View v)

{

number.append("4");

}

public void five(View v)

{

number.append("5");

}

public void six(View v)

{

number.append("6");

}

public void seven(View v)

{

number.append("7");

}

public void eight(View v)

{

number.append("8");

}

public void nine(View v)

{

number.append("9");

}

public void zero(View v)

{

number.append("0");

}

public void star(View v)

{

number.append("\*");

}

public void hash(View v)

{

number.append("#");

}

public void delete(View v)

{

String n=number.getText().toString();

n=n.substring(0,n.length()-1);

number.setText(n);

}

public void call(View v)

{

String num=number.getText().toString();

Intent i =new Intent(Intent.ACTION\_DIAL, Uri.parse("tel:"+num));

//Intent i =new Intent(Intent.ACTION\_VIEW,Uri.parse(num));

startActivity(i);

}

public void save(View v)

{

String num=number.getText().toString();

Intent i =new Intent(Intent.ACTION\_INSERT,

ContactsContract.Contacts.CONTENT\_URI);

i.putExtra(ContactsContract.Intents.Insert.PHONE,num);

startActivity(i);

}

}