**Program-8:**

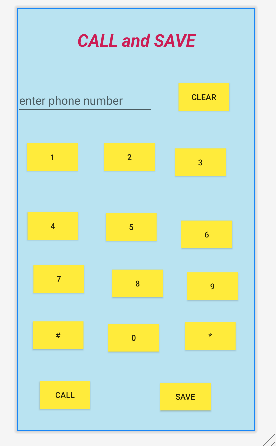
Create an activity like a phone dialler with CALL and SAVE buttons. On pressing the CALL button, it must call the phone number and on pressing the SAVE button it must save the number to the phone contacts.

***XML 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"  
 android:background="#B9E3F1"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="285dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="62dp"  
 android:layout\_marginBottom="656dp"  
 android:text="CALL and SAVE"  
 android:textAlignment="center"  
 android:textColor="#CC1D54"  
 android:textSize="30dp"  
 android:textStyle="bold|italic"  
 tools:layout\_editor\_absoluteX="10dp"  
 tools:layout\_editor\_absoluteY="34dp" />  
  
 <EditText  
 android:id="@+id/editTextPhone"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginBottom="547dp"  
  
 android:ems="10"  
 android:hint="enter phone number"  
 android:inputType="phone"  
 android:textSize="20dp"  
 tools:layout\_editor\_absoluteX="29dp"  
 tools:layout\_editor\_absoluteY="147dp" />  
  
 <Button  
 android:id="@+id/button1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="306dp"  
 android:layout\_marginBottom="449dp"  
 android:background="#FFEB3B"  
 android:text="1"  
 tools:layout\_editor\_absoluteX="27dp"  
 tools:layout\_editor\_absoluteY="232dp" />  
  
 <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="172dp"  
 android:layout\_marginBottom="449dp"  
 android:text="2"  
 android:background="#FFEB3B"  
 tools:layout\_editor\_absoluteX="153dp"  
 tools:layout\_editor\_absoluteY="235dp" />  
  
 <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="49dp"  
 android:layout\_marginBottom="440dp"  
 android:background="#FFEB3B"  
 android:text="3"  
 tools:layout\_editor\_absoluteX="270dp"  
 tools:layout\_editor\_absoluteY="235dp" />  
  
 <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="305dp"  
 android:layout\_marginBottom="330dp"  
 android:background="#FFEB3B"  
 android:text="4"  
 tools:layout\_editor\_absoluteX="19dp"  
 tools:layout\_editor\_absoluteY="331dp" />  
  
 <Button  
 android:id="@+id/button5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="169dp"  
 android:layout\_marginBottom="328dp"  
 android:background="#FFEB3B"  
 android:text="5"  
 tools:layout\_editor\_absoluteX="149dp"  
 tools:layout\_editor\_absoluteY="337dp" />  
  
 <Button  
 android:id="@+id/button6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="38dp"  
 android:layout\_marginBottom="315dp"  
 android:background="#FFEB3B"  
 android:text="6"  
 tools:layout\_editor\_absoluteX="273dp"  
 tools:layout\_editor\_absoluteY="333dp" />  
  
 <Button  
 android:id="@+id/button7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="295dp"  
 android:background="#FFEB3B"  
 android:layout\_marginBottom="238dp"  
 android:text="7"  
 tools:layout\_editor\_absoluteX="27dp"  
 tools:layout\_editor\_absoluteY="425dp" />  
  
 <Button  
 android:id="@+id/button8"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="158dp"  
 android:layout\_marginBottom="230dp"  
 android:background="#FFEB3B"  
 android:text="8"  
 tools:layout\_editor\_absoluteX="160dp"  
 tools:layout\_editor\_absoluteY="425dp" />  
  
 <Button  
 android:id="@+id/button9"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="28dp"  
 android:layout\_marginBottom="225dp"  
 android:background="#FFEB3B"  
 android:text="9"  
 tools:layout\_editor\_absoluteX="268dp"  
 tools:layout\_editor\_absoluteY="425dp" />  
  
 <Button  
 android:id="@+id/starbtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="32dp"  
 android:layout\_marginBottom="139dp"  
 android:background="#FFEB3B"  
 android:text="\*"  
 tools:layout\_editor\_absoluteX="19dp"  
 tools:layout\_editor\_absoluteY="533dp" />  
  
 <Button  
 android:id="@+id/button11"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="165dp"  
 android:layout\_marginBottom="136dp"  
 android:background="#FFEB3B"  
 android:text="0"  
 tools:layout\_editor\_absoluteX="149dp"  
 tools:layout\_editor\_absoluteY="527dp" />  
  
 <Button  
 android:id="@+id/hashbtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="296dp"  
 android:layout\_marginBottom="140dp"  
 android:background="#FFEB3B"  
 android:text="#"  
 tools:layout\_editor\_absoluteX="272dp"  
 tools:layout\_editor\_absoluteY="529dp" />  
  
 <Button  
 android:id="@+id/callBtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="284dp"  
 android:layout\_marginBottom="37dp"  
 android:background="#FFEB3B"  
 android:text="Call"  
 tools:layout\_editor\_absoluteX="73dp"  
 tools:layout\_editor\_absoluteY="637dp" />  
  
 <Button  
 android:id="@+id/saveBtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="75dp"  
 android:layout\_marginBottom="34dp"  
 android:background="#FFEB3B"  
 android:text="Save"  
 tools:layout\_editor\_absoluteX="212dp"  
 tools:layout\_editor\_absoluteY="637dp" />  
  
 <Button  
 android:id="@+id/clearBtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="43dp"  
 android:layout\_marginBottom="553dp"  
 android:background="#FFEB3B"  
  
 android:text="Clear"  
 android:textColorHighlight="#C20DE1"  
 app:strokeColor="#2E2727" />  
</RelativeLayout>

JAVA CODE:

package com.example.call;  
 import androidx.appcompat.app.AppCompatActivity;  
  
 import android.content.Intent;  
 import android.net.Uri;  
 import android.os.Bundle;  
 import android.provider.ContactsContract;  
 import android.view.View;  
 import android.widget.Button;  
 import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
 Button oneBtn, twoBtn, threeBtn, fourBtn, fiveBtn;  
 Button sixBtn, sevenBtn, eightBtn, nineBtn, zeroBtn;  
 Button starBtn, hashBtn;  
 Button delBtn, callBtn, saveBtn;  
 EditText phoneNumber;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 oneBtn = (Button) findViewById(R.id.*button1*);  
 oneBtn.setOnClickListener(this);  
  
 twoBtn = (Button) findViewById(R.id.*button2*);  
 twoBtn.setOnClickListener(this);  
  
 threeBtn = (Button) findViewById(R.id.*button3*);  
 threeBtn.setOnClickListener(this);  
  
 fourBtn = (Button) findViewById(R.id.*button4*);  
 fourBtn.setOnClickListener(this);  
  
 fiveBtn = (Button) findViewById(R.id.*button5*);  
 fiveBtn.setOnClickListener(this);  
  
 sixBtn = (Button) findViewById(R.id.*button6*);  
 sixBtn.setOnClickListener(this);  
  
 sevenBtn = (Button) findViewById(R.id.*button7*);  
 sevenBtn.setOnClickListener(this);  
  
 eightBtn = (Button) findViewById(R.id.*button8*);  
 eightBtn.setOnClickListener(this);  
  
 nineBtn = (Button) findViewById(R.id.*button9*);  
 nineBtn.setOnClickListener(this);  
  
 zeroBtn = (Button) findViewById(R.id.*button11*);  
 zeroBtn.setOnClickListener(this);  
  
 delBtn = (Button) findViewById(R.id.*clearBtn*);  
 delBtn.setOnClickListener(this);  
  
 callBtn = (Button) findViewById(R.id.*callBtn*);  
 callBtn.setOnClickListener(this);  
  
 saveBtn = (Button) findViewById(R.id.*saveBtn*);  
 saveBtn.setOnClickListener(this);  
  
 starBtn = (Button) findViewById(R.id.*starbtn*);  
 starBtn.setOnClickListener(this);  
  
 hashBtn = (Button) findViewById(R.id.*hashbtn*);  
 hashBtn.setOnClickListener(this);  
  
 phoneNumber = findViewById(R.id.*editTextPhone*);  
 phoneNumber.setText("");  
 }  
  
 @Override  
 public void onClick(View view) {  
 Button btn = (Button)view;  
 if(view.equals(delBtn)) {  
 String phoneNum = phoneNumber.getText().toString();  
 if (phoneNum.length() > 0) {  
 phoneNumber.setText(phoneNum.substring(0, phoneNum.length()-1));  
 } else {  
 phoneNumber.setText("");  
 }  
 phoneNumber.setSelection(phoneNumber.getText().toString().length());  
 } else if(view.equals(callBtn)) {  
 System.*out*.print("Call Button Pressed");  
 String phoneNum = phoneNumber.getText().toString();  
 Intent = new Intent(Intent.*ACTION\_DIAL*);  
 intent.setData(Uri.*parse*("tel:"+phoneNum));  
 startActivity(intent);  
 } else if(view.equals(saveBtn)) {  
 System.*out*.print("Save Button Pressed");  
 String phoneNum = phoneNumber.getText().toString();  
 Intent = new Intent(ContactsContract.Intents.Insert.*ACTION*);  
 intent.setType(ContactsContract.RawContacts.*CONTENT\_TYPE*);  
 intent.putExtra(ContactsContract.Intents.Insert.*NAME*, "Unknown");  
 intent.putExtra(ContactsContract.Intents.Insert.*PHONE*, phoneNum);  
 startActivity(intent);  
 } else {  
 phoneNumber.append(btn.getText());  
 }  
 }  
}

OUT PUT