8.call and save

File name :call

Android manifest:

<uses-permission *android:name*="android.permission.CALL\_PHONE"/>  
<uses-permission *android:name*="android.permission.WRITE\_CONTACTS" />

Activity main:<layout></layout>

Gradle file: Android: --- dataBinding.enabled=true

Java file:

*package* com.example.call;  
  
*import* androidx.annotation.NonNull;  
*import* androidx.appcompat.app.AppCompatActivity;  
*import* androidx.annotation.RequiresApi;  
  
*import* android.Manifest;  
*import* android.annotation.SuppressLint;  
*import* android.content.Context;  
*import* android.content.Intent;  
*import* android.content.pm.PackageManager;  
*import* android.net.Uri;  
*import* android.os.Build;  
*import* android.os.Bundle;  
*import* android.provider.ContactsContract;  
*import* android.telephony.PhoneNumberUtils;  
*import* android.view.View;  
*import* android.widget.Button;  
*import* android.widget.EditText;  
*import* android.widget.Toast;  
*import* androidx.core.app.ActivityCompat;  
*import* androidx.core.content.ContextCompat;  
*import* androidx.databinding.DataBindingUtil;  
*import* com.example.call.databinding.ActivityMainBinding;  
*public class* MainActivity *extends* AppCompatActivity {  
 *private* ActivityMainBinding binding;  
 *private static final int REQUEST\_CALL*=1;  
 *private* EditText mEditPhoneNumber;  
 @RequiresApi(api = Build.VERSION\_CODES.*LOLLIPOP*)  
 @SuppressLint("SetTextI18n")  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 binding = (ActivityMainBinding) DataBindingUtil.*setContentView*(*this*, R.layout.*activity\_main*);  
  
 PhoneNumberUtils.*formatNumber*(binding.tv.getText().toString());  
  
 binding.tv.setShowSoftInputOnFocus(*false*);  
  
 binding.b0.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "0"));  
 binding.b1.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "1"));  
 binding.b2.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "2"));  
 binding.b3.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "3"));  
 binding.b4.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "4"));  
 binding.b5.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "5"));  
 binding.b6.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "6"));  
 binding.b7.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "7"));  
 binding.b8.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "8"));  
 binding.b9.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "9"));  
 binding.bstar.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "\*"));  
 binding.bhash.setOnClickListener(v -> binding.tv.setText(binding.tv.getText() + "#"));

binding.bcall.setOnClickListener(v->{  
 *if*(binding.tv.getText().length() > 0) {  
 String phStr = "tel:" +binding.tv.getText().toString();  
 makePhoneCall(phStr);  
 }*else*{  
 Toast.*makeText*(MainActivity.*this*, "Unable to call",Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 binding.bdel.setOnClickListener(v -> {  
 *if*(binding.tv.getText().length() > 0) {  
 *CharSequence* currentText = binding.tv.getText();  
 binding.tv.setText(currentText.subSequence(0, currentText.length()-1));  
 }  
 *else* {  
 binding.tv.setText("");  
 }  
 });  
 binding.bsave.setOnClickListener(*new* View.OnClickListener() {  
 @SuppressLint("QueryPermissionsNeeded")  
 @Override  
 *public void* onClick(View v) {  
 *if*(!binding.tv.getText().toString().isEmpty()){  
 String phoneNumber=binding.tv.getText().toString();  
 Intent intent = *new* Intent(Intent.*ACTION\_INSERT*);  
 intent.setType(ContactsContract.RawContacts.*CONTENT\_TYPE*);  
 intent.putExtra(ContactsContract.Intents.Insert.*PHONE*, phoneNumber);  
 *// if(intent.resolveActivity(getPackageManager())!=null){* startActivity(intent);  
*// }else {  
// Toast.makeText(getApplicationContext(),"No app to support", Toast.LENGTH\_SHORT).show();  
// }* }  
 }  
 });  
 }  
 *private void* makePhoneCall(String PhStr){  
 *if* (Build.VERSION.*SDK\_INT* >= Build.VERSION\_CODES.*LOLLIPOP*) {  
 Intent callIntent = *new* Intent(Intent.*ACTION\_CALL*);  
 callIntent.setData(Uri.*parse*(PhStr));  
 startActivity(callIntent);  
 }  
 }  
}

Android.xml:

<?*xml version*="1.0" *encoding*="utf-8"?>  
<layout>  
<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">  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:background*="#B3DBED"  
 *android:orientation*="vertical"  
 *tools:layout\_editor\_absoluteX*="-70dp"  
 *tools:layout\_editor\_absoluteY*="-32dp">  
  
 <EditText  
 *android:id*="@+id/editTextTextPersonName"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:ems*="10"  
 *android:gravity*="center"  
 *android:inputType*="textPersonName"  
 *android:text*="CALL AND SAVE APPLICATION"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
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 *android:layout\_marginStart*="10dp"  
 *android:layout\_marginLeft*="10dp"  
 *android:layout\_marginTop*="20dp"  
 *android:layout\_marginEnd*="10dp"  
 *android:layout\_marginRight*="10dp"  
 *android:orientation*="horizontal">  
  
 <TextView  
 *android:id*="@+id/tv"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="40dp"  
 *android:layout\_marginStart*="20dp"  
 *android:layout\_marginLeft*="20dp"  
 *android:layout\_weight*="1"  
 *android:background*="#F4D5CC"  
 *android:textSize*="20sp" />  
  
 <Button  
 *android:id*="@+id/bdel"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="50dp"  
 *android:layout\_marginLeft*="50dp"  
 *android:layout\_marginTop*="10dp"  
 *android:layout\_weight*="1"  
 *android:text*="DEL"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
 </LinearLayout>  
  
 <LinearLayout  
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 *android:layout\_height*="60dp"  
 *android:layout\_marginStart*="10dp"  
 *android:layout\_marginLeft*="10dp"  
 *android:layout\_marginTop*="20dp"  
 *android:layout\_marginEnd*="10dp"  
 *android:layout\_marginRight*="10dp"  
 *android:orientation*="vertical">  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="horizontal">  
  
 <Button  
 *android:id*="@+id/b1"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="1"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b2"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="2"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b3"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="3"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
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 </LinearLayout>  
  
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 *android:layout\_height*="60dp"  
 *android:layout\_marginStart*="10dp"  
 *android:layout\_marginLeft*="10dp"  
 *android:layout\_marginTop*="20dp"  
 *android:layout\_marginEnd*="10dp"  
 *android:layout\_marginRight*="10dp"  
 *android:orientation*="vertical">  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="horizontal">  
  
 <Button  
 *android:id*="@+id/b4"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="4"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b5"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="5"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b6"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="6"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
 </LinearLayout>  
 </LinearLayout>  
  
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 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="60dp"  
 *android:layout\_marginStart*="10dp"  
 *android:layout\_marginLeft*="10dp"  
 *android:layout\_marginTop*="20dp"  
 *android:layout\_marginEnd*="10dp"  
 *android:layout\_marginRight*="10dp"  
 *android:orientation*="vertical">  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="horizontal">  
  
 <Button  
 *android:id*="@+id/b7"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="7"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b8"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="8"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b9"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="9"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
 </LinearLayout>  
 </LinearLayout>  
  
 <LinearLayout  
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 *android:layout\_marginEnd*="10dp"  
 *android:layout\_marginRight*="10dp"  
 *android:orientation*="vertical">  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="horizontal">  
  
 <Button  
 *android:id*="@+id/bstar"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="\*"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/b0"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="0"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/bhash"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="25dp"  
 *android:layout\_marginLeft*="25dp"  
 *android:layout\_marginEnd*="25dp"  
 *android:layout\_marginRight*="25dp"  
 *android:layout\_weight*="1"  
 *android:text*="#"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
 </LinearLayout>  
 </LinearLayout>

<LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="60dp"  
 *android:layout\_marginStart*="10dp"  
 *android:layout\_marginLeft*="10dp"  
 *android:layout\_marginTop*="20dp"  
 *android:layout\_marginEnd*="10dp"  
 *android:layout\_marginRight*="10dp"  
 *android:orientation*="vertical">  
  
 <LinearLayout  
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 *android:layout\_height*="match\_parent"  
 *android:orientation*="horizontal">  
  
 <Button  
 *android:id*="@+id/bcall"  
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 *android:layout\_marginLeft*="30dp"  
 *android:layout\_marginEnd*="30dp"  
 *android:layout\_marginRight*="30dp"  
 *android:layout\_weight*="1"  
 *android:text*="CALL"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <Button  
 *android:id*="@+id/bsave"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginStart*="30dp"  
 *android:layout\_marginLeft*="30dp"  
 *android:layout\_marginEnd*="30dp"  
 *android:layout\_marginRight*="30dp"  
 *android:layout\_weight*="1"  
 *android:text*="SAVE"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
 </LinearLayout>  
 </LinearLayout>  
  
 </LinearLayout>  
</androidx.constraintlayout.widget.ConstraintLayout>  
</layout>