**ProgramNo8-**

**Activity\_main.xml**

<?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">

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="vertical"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.5"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent">

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<com.google.android.material.textview.MaterialTextView

android:id="@+id/contact"

android:layout\_width="200dp"

android:layout\_height="100dp"

android:gravity="center"

android:textSize="24sp"/>

<com.google.android.material.textview.MaterialTextView

android:id="@+id/clear"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="X"

android:textSize="24sp" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<com.google.android.material.textview.MaterialTextView

android:id="@+id/one"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="1"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/two"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="2"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/three"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="3"

android:textSize="24sp" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<com.google.android.material.textview.MaterialTextView

android:id="@+id/four"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="4"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/five"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="5"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/six"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="6"

android:textSize="24sp" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<com.google.android.material.textview.MaterialTextView

android:id="@+id/seven"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="7"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/eight"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="8"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/nine"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="9"

android:textSize="24sp" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<com.google.android.material.textview.MaterialTextView

android:id="@+id/star"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="\*"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/zero"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="0"

android:textSize="24sp" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/hash"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:gravity="center"

android:text="#"

android:textSize="24sp" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<com.google.android.material.button.MaterialButton

android:id="@+id/call"

android:layout\_width="134dp"

android:layout\_height="54dp"

android:layout\_margin="8dp"

android:text="Call"/>

<com.google.android.material.button.MaterialButton

android:id="@+id/save"

android:layout\_width="134dp"

android:layout\_height="54dp"

android:layout\_margin="8dp"

android:text="Save"/>

</LinearLayout>

</LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.kt**

package com.example.phonedialer

import android.R.attr.phoneNumber

import android.content.Intent

import android.net.Uri

import android.os.Bundle

import android.provider.ContactsContract

import android.widget.Button

import android.widget.TextView

import androidx.appcompat.app.AppCompatActivity

class MainActivity :AppCompatActivity() {

private lateinit var saveBtn: Button

private lateinit var callBtn: Button

private lateinit var zero: TextView

private lateinit var one: TextView

private lateinit var two: TextView

private lateinit var three: TextView

private lateinit var four: TextView

private lateinit var five: TextView

private lateinit var six: TextView

private lateinit var seven: TextView

private lateinit var eight: TextView

private lateinit var nine: TextView

private lateinit var star: TextView

private lateinit var hash: TextView

private lateinit var clear: TextView

private lateinit var contact: TextView

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.activity\_main)

saveBtn = findViewById(R.id.save)

callBtn = findViewById(R.id.call)

zero = findViewById(R.id.zero)

one = findViewById(R.id.one)

two = findViewById(R.id.two)

three = findViewById(R.id.three)

four = findViewById(R.id.four)

five = findViewById(R.id.five)

six = findViewById(R.id.six)

seven = findViewById(R.id.seven)

eight = findViewById(R.id.eight)

nine = findViewById(R.id.nine)

star = findViewById(R.id.star)

hash = findViewById(R.id.hash)

clear = findViewById(R.id.clear)

contact = findViewById(R.id.contact)

zero.setOnClickListener {

pressButton("0", true)

}

one.setOnClickListener {

pressButton("1", true)

}

two.setOnClickListener {

pressButton("2", true)

}

three.setOnClickListener {

pressButton("3", true)

}

four.setOnClickListener {

pressButton("4", true)

}

five.setOnClickListener {

pressButton("5", true)

}

six.setOnClickListener {

pressButton("6", true)

}

seven.setOnClickListener {

pressButton("7", true)

}

eight.setOnClickListener {

pressButton("8", true)

}

nine.setOnClickListener {

pressButton("9", true)

}

star.setOnClickListener {

pressButton("\*", true)

}

hash.setOnClickListener {

pressButton("#", true)

}

clear.setOnClickListener {

contact.text = ""

}

callBtn.setOnClickListener {

val intent = Intent(Intent.ACTION\_CALL, Uri.parse("tel:" + "${contact.text}"))

startActivity(intent)

}

saveBtn.setOnClickListener {

val intent = Intent(

ContactsContract.Intents.SHOW\_OR\_CREATE\_CONTACT,

Uri.parse("tel:" + contact.text))

intent.putExtra(ContactsContract.Intents.EXTRA\_FORCE\_CREATE, true)

startActivity(intent)

}

}

fun pressButton(string: String, clear: Boolean) {

if (!clear) {

contact.text = ""

} else {

contact.append(string)

}

}

}

**AndroidManifest.xml**

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

package="com.example.phonedialer">

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

<uses-permission android:name="android.permission.MANAGE\_OWN\_CALLS" />

<uses-permission android:name="android.permission.MANAGE\_OUTGOING\_CALLS" />

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

<uses-permission android:name="android.permission.READ\_CONTACTS" />

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.Phonedialer"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>