

PART – A

Experiment-No: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.

Components Used:

- Buttons: To Call and save phone number.
- Phone: To take the phone number from user.

XML Code:

```
<?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"
android:background="#3F51B5"
tools:context=".MainActivity">

    <EditText
        android:id="@+id/phoneno"
        android:layout_width="260dp"
        android:layout_height="77dp"
        android:ems="10"
        android:inputType="phone"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.231" />

    <ImageButton
        android:id="@+id/phone"
        android:layout_width="103dp"
        android:layout_height="103dp"
        android:layout_marginTop="120dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/save"
```

```

        app:layout_constraintHorizontal_bias="0.583"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/phoneno"
        app:layout_constraintVertical_bias="0.0"
        app:srcCompat="@drawable/ic_action_name" />

<ImageButton
    android:id="@+id/save"
    android:layout_width="103dp"
    android:layout_height="103dp"
    android:layout_marginTop="120dp"
    android:layout_marginEnd="80dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/phoneno"
    app:layout_constraintVertical_bias="0.006"
    app:srcCompat="@drawable/ic_save" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

Java Code:

```

package com.keshavrkaranth.phone_call;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;

import android.Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.net.Uri;
import android.os.Bundle;
import android.provider.ContactsContract;
import android.view.View;
import android.widget.EditText;
import android.widget.ImageButton;

import java.security.acl.Permission;

public class MainActivity extends AppCompatActivity {

    EditText phone_no;
    ImageButton phone,save;

```

```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

    phone_no = findViewById(R.id.phoneno);
    phone = findViewById(R.id.phone);
    save = findViewById(R.id.save);

    phone.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            if (ContextCompat.checkSelfPermission(MainActivity.this,
Manifest.permission.CALL_PHONE) != PackageManager.PERMISSION_GRANTED){
                ActivityCompat.requestPermissions(MainActivity.this,new
String[]{Manifest.permission.CALL_PHONE},1);
            }else {
                startActivity(new Intent(Intent.ACTION_CALL,
Uri.parse("tel:"+String.valueOf(phone_no.getText().toString()))));
            }
        }
    });

    save.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String phonenumber = phone_no.getText().toString();
            Intent intent =new Intent(Intent.ACTION_INSERT);
            intent.setType(ContactsContract.Contacts.CONTENT_TYPE);
            intent.putExtra(ContactsContract.Intents.Insert.PHONE,phonenumber);
            startActivity(intent);

        }
    });
}
```

Manifest file:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.keshavrkaranth.phone_call">
    <uses-permission android:name="android.permission.CALL_PHONE"/>
    <uses-permission android:name="android.permission.WRITE_CONTACTS"/>
    <uses-permission android:name="android.permission.READ_CONTACTS"/>
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Phonecall">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

Sample Output:

