

PRACTICAL NO – 06

AIM :- Write a program to send and receive text messages using SMSManager API.

activity_main.xml File:-

```
<?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"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/editTextText"
        android:layout_marginTop="100dp"
        android:layout_width="375dp"
        android:layout_height="55dp"
        android:ems="10"
        android:hint="Enter number" />
    <EditText
        android:layout_marginTop="20dp"
        android:id="@+id/editTextText2"
        android:layout_width="361dp"
        android:layout_height="50dp"
        android:ems="10"
        android:inputType="text"
        android:hint="Enter Name"
    "/>

    <Button
        android:layout_marginTop="20dp"
        android:id="@+id/button"
        android:layout_gravity="center"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Send Text" />

</LinearLayout>
```

MainActivity File.

```
package com.example.smsapi;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;
```

```
import android.telephony.SmsManager;

import android.widget.Toast;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;


public class MainActivity extends AppCompatActivity {

    Button button ; EditText phno;

    EditText msg;


    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        button = (Button) findViewById(R.id.button);

        phno = (EditText) findViewById(R.id.editTextText);

        msg = (EditText) findViewById(R.id.editTextText2);

        button.setOnClickListener(new View.OnClickListener(){

            public void onClick(View view){

                sendSMSMessage ();

            } }); }

    protected void sendSMSMessage() {

        String phoneNo = phno.getText().toString();

        String message = msg.getText().toString();

        try{

            SmsManager smsManager = SmsManager.getDefault();

            if(phoneNo.length()==10){

                Toast.makeText(this, "", Toast.LENGTH_SHORT).show();

            }

            else{

                Toast.makeText(this,"Invalid number",

Toast.LENGTH_SHORT).show();

                return;

            }

        }
```

```
        smsManager.sendTextMessage(phoneNo, null,
message,null,null);

        Toast.makeText(getApplicationContext(), "SMS sent.",
Toast.LENGTH_LONG). show();
    }

    catch (Exception e) {

        Toast.makeText(getApplicationContext(), "SMS failed, please
try again.", Toast.LENGTH_LONG).show();

        e.printStackTrace();

    }
}
```

Android Manifest.xml File.

```
<?xml version="1.0" encoding="utf-8"?>
<manifest
xmlns:android="http://schemas.android.com/apk/res/androi
d"
xmlns:tools="http://schemas.android.com/tools">
    <uses-feature
        android:name="android.hardware.telephony"
        android:required="false" />

    <uses-permission
android:name="android.permission.SEND_SMS"/>

    <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.SmsApi"
        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
```

OUTPUT:-

