

## **Program 2**

**Design an application that contains phone contacts in vertical linear manner. Selected contacts appear at the top of the list with large italicized font and a blue background.**

### **AndroidManifest.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.contactslist1">
    <uses-permission
android:name="android.permission.READ_CONTACTS"></uses-permission>
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <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>
```

### **MainActivity.java**

```
package com.example.contactslist1;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;
import android.Manifest;
import android.content.ContentResolver;
```

```
import android.content.pm.PackageManager;
import android.database.Cursor;
import android.graphics.Color;
import android.graphics.Typeface;
import android.os.Bundle;
import android.os.Handler;
import android.provider.ContactsContract;
import android.view.View;
import android.widget.AbsListView;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.TextView;
import java.util.ArrayList;
```

```
public class MainActivity extends AppCompatActivity {
    ListView listView;
    ArrayList<String> contactList;
    String name, number;
    final private int REQUEST_CODE = 1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        if (ContextCompat.checkSelfPermission(MainActivity.this,
Manifest.permission.READ_CONTACTS) !=
PackageManager.PERMISSION_GRANTED) {
            ActivityCompat.requestPermissions(MainActivity.this, new
```

```

String[] {Manifest.permission.READ_CONTACTS}, REQUEST_CODE);
    }
    listView = (ListView) findViewById(R.id.list);
    contactList = new ArrayList<String>();
    getContactsList();
    ArrayAdapter<String> arrayAdapter = new
ArrayAdapter<String>(MainActivity.this, R.layout.list, contactList);
    listView.setAdapter(arrayAdapter);
    listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
        @Override
        public void onItemClick(AdapterView<?> adapterView, View view, int i,
long l) {

            int offset = 0;
            int duration = 500;
            final TextView tv = (TextView) view.findViewById(R.id.listText);
            listView.smoothScrollToPositionFromTop(i, offset, duration);

            Handler handler = new Handler();
            handler.postDelayed(new Runnable() {
                @Override
                public void run() {
                    tv.setTextSize(30);
                    tv.setBackgroundColor(Color.parseColor("#a4e9f9"));
                    tv.setTypeface(null, Typeface.ITALIC);
                }
            }, 500);

        }
    });
    listView.setOnScrollListener(new AbsListView.OnScrollListener() {
        @Override
        public void onScrollStateChanged(AbsListView absListView, int i) {
            TextView tv = (TextView) absListView.findViewById(R.id.listText);
            tv.setTextSize(22);
            tv.setBackgroundColor(Color.parseColor("#ffffff"));

```

```

        tv.setTypeface(null, Typeface.NORMAL);
    }

    @Override
    public void onScroll(AbsListView absListView, int i, int i1, int i2) {

    }

    });
}

public void getContactsList() {
    ContentResolver cr = getContentResolver();
    Cursor cur =
cr.query(ContactsContract.CommonDataKinds.Phone.CONTENT_URI, null, null,
null, null);
    while (cur.moveToNext()) {
        name =
cur.getString(cur.getColumnIndex(ContactsContract.CommonDataKinds.Phone.DISPLAY_NAME));
        number =
cur.getString(cur.getColumnIndex(ContactsContract.CommonDataKinds.Phone.NUMBER));
        contactList.add(name + " : " + number);
    }
    cur.close();
}
}

```

## **activity\_main.xml**

```
<?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">
```

```
    <ListView
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:id="@+id/list"
        android:background="#ffffff"
        android:clickable="true">
    </ListView>
```

```
</LinearLayout>
<?xml version="1.0" encoding="utf-8"?>
<TextView android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textColor="#000000"
    android:background="#ffffff"
    android:textSize="22sp"
    android:id="@+id/listText"
    android:padding="10dp"
    xmlns:android="http://schemas.android.com/apk/res/android" />
```

### list.xml

```
<?xml version="1.0" encoding="utf-8"?>
<TextView android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:textColor="#000000"
android:background="#ffffff"
android:textSize="22sp"
android:id="@+id/listText"

    android:padding="10dp"
xmlns:android="http://schemas.android.com/apk/res/android"
/>
```

