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| 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.contactlist">   <uses-permission android:name="android.permission.READ\_CONTACTS"/>  <uses-permission android:name="android.permission.WRITE\_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.ContactList"  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>  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"  android:id="@+id/idLayout"  tools:context=".MainActivity">   <ListView  android:id="@+id/idList"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"></ListView>  </LinearLayout>  colors.xml  <?xml version="1.0" encoding="utf-8"?> <resources>  <color name="purple\_200">#FFBB86FC</color>  <color name="purple\_500">#FF6200EE</color>  <color name="purple\_700">#FF3700B3</color>  <color name="teal\_200">#FF03DAC5</color>  <color name="teal\_700">#FF018786</color>  <color name="black">#FF000000</color>  <color name="white">#FFFFFFFF</color> </resources>  themes.xml  <resources xmlns:tools="http://schemas.android.com/tools">  <!-- Base application theme. -->  <style name="Theme.ContactList" parent="Theme.MaterialComponents.DayNight.DarkActionBar">  <!-- Primary brand color. -->  <item name="colorPrimary">@color/purple\_500</item>  <item name="colorPrimaryVariant">@color/purple\_700</item>  <item name="colorOnPrimary">@color/white</item>  <!-- Secondary brand color. -->  <item name="colorSecondary">@color/teal\_200</item>  <item name="colorSecondaryVariant">@color/teal\_700</item>  <item name="colorOnSecondary">@color/black</item>  <!-- Status bar color. -->  <item name="android:statusBarColor" tools:targetApi="l">?attr/colorPrimaryVariant</item>  <!-- Customize your theme here. -->  </style> </resources> | strings.xml  <resources>  <string name="app\_name">ContactList</string> </resources>  MainActivity.java  package com.example.contactlist;  import androidx.appcompat.app.AppCompatActivity; import androidx.core.app.ActivityCompat; import androidx.core.content.ContextCompat;  import android.Manifest; import android.content.pm.PackageManager; import android.database.Cursor; import android.os.Bundle; import android.provider.ContactsContract; import android.widget.ArrayAdapter; import android.widget.ListView; import android.widget.TextView; import android.widget.Toast;  import java.util.ArrayList;  public class MainActivity extends AppCompatActivity {  ListView listView;  TextView textView;  private static final int  *PERMISSIONS\_REQUEST\_READ\_CONTACTS*=100;  Cursor c;  ArrayList<String> contacts;  @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  setContentView(R.layout.*activity\_main*);  listView=(ListView)findViewById(R.id.*idList*);   int permissionCheck= ContextCompat.  *checkSelfPermission*(this,  Manifest.permission.*READ\_CONTACTS*);  if(permissionCheck== PackageManager.  *PERMISSION\_GRANTED*){  showContacts();  }  else{  ActivityCompat.*requestPermissions*(this,  new String[]{Manifest.permission.  *READ\_CONTACTS*},  *PERMISSIONS\_REQUEST\_READ\_CONTACTS*);   }  ArrayAdapter<String> adapter=new ArrayAdapter<String>(this,android.R.layout.  *simple\_list\_item\_1*,contacts);  listView.setAdapter(adapter);  }  public void onRequestPermissionResult(  int requestCode, String[] permissions,int[] grantResults){  if (requestCode==*PERMISSIONS\_REQUEST\_READ\_CONTACTS*){  if(grantResults[0]==  PackageManager.*PERMISSION\_GRANTED*){  showContacts();  }  else {  Toast.*makeText*(this,  "Until you grant the permission , we cannotdisplay the names",  Toast.*LENGTH\_SHORT*).show();  }  }  }  private void showContacts(){  c=getContentResolver().query(ContactsContract.  CommonDataKinds.Phone.*CONTENT\_URI*,null,  null,null,ContactsContract.  Contacts.*DISPLAY\_NAME*+ " ASC ");  contacts=new ArrayList<String>();  while(c.moveToNext()){  String contactName= c.getString  (c.getColumnIndexOrThrow  (ContactsContract.  CommonDataKinds.Phone.*DISPLAY\_NAME*));  String phNumber=c.getString(c.getColumnIndexOrThrow  (ContactsContract.CommonDataKinds.Phone.*NUMBER*));  contacts.add("Name:"+contactName+"\n"+"PhoneNo:"+ phNumber);  }  c.close();  } } |

Output

