Application Name: ContentProviderExample

```java
package com.example.conentproviderexample;

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

import android.Manifest;
import android.annotation.SuppressLint;
import android.content.ContentResolver;
import android.content.pm.PackageManager;
import android.database.Cursor;
import android.net.Uri;
import android.os.Bundle;
import android.provider.ContactsContract;
import android.util.Log;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {
    ListView list;
    ArrayList<String> listdata;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        int p= ContextCompat.checkSelfPermission(this,
Manifest.permission.READ_CONTACTS);
        //int q= ContextCompat.checkSelfPermission(this,
Manifest.permission.READ_CONTACTS);
        if (p!=PackageManager.PERMISSION_GRANTED)
        {
            ActivityCompat.requestPermissions(this, new
String[] {Manifest.permission.READ_CONTACTS},0);
            Toast.makeText(this,"Permission Granted",
Toast.LENGTH_LONG).show();
        }
```

```java
        //Toast.makeText(this, "Hello",
Toast.LENGTH_LONG).show();
        list=findViewById(R.id.list);
        listdata=new ArrayList<String>();
//.......................................................
................
        ContentResolver resolver=getContentResolver();
        Uri uri=
ContactsContract.CommonDataKinds.Phone.CONTENT_URI;
        Toast.makeText(this, "uri",
Toast.LENGTH_SHORT).show();

        String projection[]=null;
        String selection=null;
        String selectionargs[]=null;
        String order=null;
        Cursor cursor=
resolver.query(uri,projection,selection,
selectionargs,order);
        //Toast.makeText(this,)
        Log.i("Contact", "Total number of contacts " +
Integer.toString(cursor.getCount()));

        if (cursor.getCount()>0)
        {
            while (cursor.moveToNext())
            {
                //Toast.makeText(this, "Record
found",Toast.LENGTH_LONG).show();


//stringBuilderQueryResult.append(cursor.getString(0)+" ,
"+cursor.getString(1)+" , "+cursor.getString(2)+"\n");
                // int
iname=cursor.getColumnIndex(String.valueOf(cursor.getColu
mnIndex(ContactsContract.CommonDataKinds.Phone.DISPLAY_NA
ME)));
                //int
inumber=cursor.getColumnIndex(String.valueOf(cursor.getCo
lumnIndex(ContactsContract.CommonDataKinds.Phone.NUMBER))
);
                //String name=cursor.getString(iname);
```

```java
                //String
number=cursor.getString(inumber);
                @SuppressLint("Range") String
name=cursor.getString(cursor.getColumnIndex(ContactsContr
act.CommonDataKinds.Phone.DISPLAY_NAME));
                @SuppressLint("Range") String
number=cursor.getString(cursor.getColumnIndex(ContactsCon
tract.CommonDataKinds.Phone.NUMBER));
                // String
name=cursor.getString(cursor.getColumnIndex(ContactsContr
act.CommonDataKinds.Phone.DISPLAY_NAME)
                // String
number=cursor.getString(cursor.getColumnIndex(ContactsCon
tract.CommonDataKinds.Phone.NUMBER));
                Log.i("Contact", name + number);
                String fullcontact=name + "\n" +  number;
                listdata.add(fullcontact);
            }

            ArrayAdapter<String> adapter= new
ArrayAdapter<String>(this,
android.R.layout.simple_list_item_1,listdata);
            list.setAdapter(adapter);
        }
        else
            Toast.makeText(this,"No
contacts",Toast.LENGTH_LONG).show();




    }
}


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<?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"
```

```xml
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <ListView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/list"/>

</LinearLayout>
```