

## Kotlin

```
class MainActivity : AppCompatActivity() {
    var cols =
        listOf<String>(ContactsContract.CommonDataKinds.Phone.DISPLAY_NAME,
            ContactsContract.CommonDataKinds.Phone.NUMBER,
            ContactsContract.CommonDataKinds.Phone._ID).toTypedArray()

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        if (ContextCompat.checkSelfPermission(this,
            Manifest.permission.READ_CONTACTS) != PackageManager.PERMISSION_GRANTED)
        {
            ActivityCompat.requestPermissions(this,
                Array(1) { Manifest.permission.READ_CONTACTS }, 111)
        }
        else
        {
            readContact()
        }
    }

    override fun onRequestPermissionsResult(
        requestCode: Int,
        permissions: Array<out String>,
        grantResults: IntArray
    ) {
        super.onRequestPermissionsResult(requestCode, permissions,
            grantResults)
        if (requestCode == 111 &&
            grantResults[0] == PackageManager.PERMISSION_GRANTED)
            readContact()
    }

    private fun readContact() {
        var from =
            listOf<String>(ContactsContract.CommonDataKinds.Phone.DISPLAY_NAME,
                ContactsContract.CommonDataKinds.Phone.NUMBER,
                ContactsContract.CommonDataKinds.Phone._ID).toTypedArray()
        var to = intArrayOf(android.R.id.text1, android.R.id.text2)
        val ll = findViewById<ListView>(R.id.ll)
        var c: ContentResolver = contentResolver
        var s =
            c.query(ContactsContract.CommonDataKinds.Phone.CONTENT_URI, cols, null, null,
                ContactsContract.CommonDataKinds.Phone.DISPLAY_NAME)
        Log.i("Contacts", s!!.count.toString())
        while (s.moveToNext()) {
            var s1: String = s.getString(0)
            var s2: String = s.getString(1)
            Log.i("Contacts", s1 + s2)
        }

        var a = SimpleCursorAdapter(this,
            android.R.layout.simple_list_item_2, s, from, to, 0)
        ll.adapter = a
    }
}
```

## XML

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical" android:layout_width="match_parent"
    android:layout_height="match_parent">
    <ListView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/l1"/>

</LinearLayout>
```

## Manifest

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