

QUE. Write a program to create your own content provider to insert and access data in android application.

ActivityMain.xml

```
<?xml version="1.0" encoding="utf-8"?>
<AbsoluteLayout 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"
    tools:context=".MainActivity">
    <ListView android:layout_width="wrap_content"
        android:layout_height="wrap_content"    android:id="@+id/l1"
        android:divider="@color/black"    android:dividerHeight="2dp"/>
</AbsoluteLayout>
```

MainActivity.java

```
package com.example.containt_provider;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;
import android.annotation.SuppressLint;
import android.content.pm.PackageManager;
import android.net.Uri;
import android.provider.ContactsContract;
import android.widget.ListView;
import android.Manifest;
import android.content.ContentResolver;
import android.database.Cursor;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {
    ListView listView;
    ArrayList arrayList;
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        listView=findViewById(R.id.l1);
        arrayList=new ArrayList<>();
        fetchContact();
    }
    private void fetchContact(){
        if(ContextCompat.checkSelfPermission(this, Manifest.permission.READ_CONTACTS)!=
        PackageManager.PERMISSION_GRANTED){
            ActivityCompat.requestPermissions(this,new String[]
            {Manifest.permission.READ_CONTACTS},0);}
        ContentResolver resolver=getContentResolver();
        Uri uri= ContactsContract.CommonDataKinds.Phone.CONTENT_URI;
        String [] projection=null;
        String selection=null;
        String [] selectionArgs=null;
        String order=null;
        Cursor cursor=resolver.query(uri,projection,selection,selectionArgs,order);
        if(cursor.getCount(>0){
            while(cursor.moveToNext()){
                @SuppressWarnings("Range") String name=cursor.getString(cursor.getColumnIndex
                (ContactsContract.CommonDataKinds.Phone.DISPLAY_NAME));
                @SuppressWarnings("Range") String number=cursor.getString(cursor.getColumnIndex
                (ContactsContract.CommonDataKinds.Phone.NUMBER));
```

```
String fullContact=name+number;    arrayList.add(fullContact); } }  
ArrayAdapter adapter=new ArrayAdapter(this,  
android.R.layout.select_dialog_item,arrayList);  
listView.setAdapter(adapter);}}
```

Manifest.java

```
<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:tools="http://schemas.android.com/tools">  
    <uses-permission android:name="android.permission.READ_CONTACTS">  
    </uses-permission>  
    <uses-permission android:name="android.permission.WRITE_CONTACTS">  
    </uses-permission>  
</manifest>
```

OUTPUT:

