**Lấy thông tin danh bạ trong điện thoại – Content Provider**

Xin quyền trong AndroidManifest

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

Tạo hàm getContact để lấy dữ liệu từ danh bạ

```java
@SuppressLint("Range")
    void getContact() {
        ContentResolver ctr = getContentResolver();
        Cursor c = ctr.query(ContactsContract.Contacts.CONTENT_URI, null, null, null, null);
        if (c.moveToFirst()) {
            do {
                String id = c.getString(c.getColumnIndex(ContactsContract.Contacts._ID));
                String name = c.getString(c.getColumnIndex(ContactsContract.Contacts.DISPLAY_NAME));


                if(Integer.parseInt(c.getString(c.getColumnIndex(ContactsContract.Contacts.HAS_PHONE_NUMBER))) > 0){
                    Cursor cursor = ctr.query(ContactsContract.CommonDataKinds.Phone.CONTENT_URI, null,
                        ContactsContract.CommonDataKinds.Phone.CONTACT_ID + " = ?", new String[]{id}, null);
                    while (cursor.moveToNext()){
                        String phone =
cursor.getString(cursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.NUMBER));
                        ds.add(id + " - " + name + " - " + phone);
                    }
                }
            } while (c.moveToNext());
        }


        ArrayAdapter<String> adapter = new ArrayAdapter<String>(Bai01Activity.this, android.R.layout.simple_list_item_1,
ds);
        listView.setAdapter(adapter);
    }
```

Viết code xin quyền

```java
@Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_bai01);


        listView = findViewById(R.id.listView);


        if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
            if (ContextCompat.checkSelfPermission(Bai01Activity.this, Manifest.permission.READ_CONTACTS) !=
PackageManager.PERMISSION_GRANTED) {
                if (ActivityCompat.shouldShowRequestPermissionRationale(Bai01Activity.this,
Manifest.permission.READ_CONTACTS)) {
                    AlertDialog.Builder builder = new AlertDialog.Builder(Bai01Activity.this);
                    builder.setTitle("Contacts access needed");
                    builder.setPositiveButton(android.R.string.ok, null);
                    builder.setMessage("please confirm Contacts access");//TODO put real question
                    builder.setOnDismissListener(new DialogInterface.OnDismissListener() {
                        @TargetApi(Build.VERSION_CODES.M)
                        @Override
                        public void onDismiss(DialogInterface dialog) {
                            requestPermissions(new String[]{Manifest.permission.READ_CONTACTS}, 7979);
                        }
                    });
                    builder.show();
                } else {
                    ActivityCompat.requestPermissions(Bai01Activity.this, new
String[]{Manifest.permission.READ_CONTACTS}, 7979);
                }
            } else {
                getContact();
            }
        } else {
            getContact();
        }
    }
```

```java
@Override
    public void onRequestPermissionsResult(int requestCode, String permissions[], int[] grantResults) {

        super.onRequestPermissionsResult(requestCode, permissions, grantResults);

        if (requestCode == 7979) {

            if (grantResults.length > 0 && grantResults[0] == PackageManager.PERMISSION_GRANTED) {

                getContact();

            } else {

                Toast.makeText(this, "khong co permission", Toast.LENGTH_SHORT).show();

            }

        }

    }
```