```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"
tools:context=".MainActivity" >

<EditText
android:layout_marginTop="50dp"
android:id="@+id/editText1"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:inputType="text" />

<Button
android:id="@+id/button1"
android:layout_marginTop="50dp"
android:layout_gravity="center"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="서비스 시작" />

<Button
android:id="@+id/button2"
android:layout_marginTop="50dp"
android:layout_gravity="center"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="서비스 종료" />
</LinearLayout>
```



```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"
tools:context=".MainActivity2">

<TextView
android:layout_marginTop="120dp"
android:textSize="50sp"
android:layout_gravity="center"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="SubActivity" />

<TextView
android:id="@+id/result"
android:textSize="30sp"
android:textAlignment="center"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="받는 정보 : " />
</LinearLayout>
```



```java
public class MainActivity extends AppCompatActivity {
EditText editText1;
Button button1, button2;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

editText1 = findViewById(R.id.editText1);
button1 = findViewById(R.id.button1);
button2 = findViewById(R.id.button2);

// 서비스 시작
button1.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
String msg = editText1.getText().toString();
// 서비스 실행 명령어
Intent intent
// = new Intent(MainActivity.this, MyService.class);
= new Intent(getApplicationContext(), MyService.class);
intent.putExtra("msg",msg);
startService(intent);
}
});

// 서비스 끝
button2.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
// 서비스 종료 명령어
Intent intent
// = new Intent(MainActivity.this, MyService.class);
= new Intent(getApplicationContext(), MyService.class);
stopService(intent);
}
});
}


@Override
protected void onNewIntent(Intent intent) {
super.onNewIntent(intent);
// 서비스에서 넘어온 intent
String msg = intent.getStringExtra("msg");
Toast.makeText(this, "서비스에서 넘어온 "+msg, Toast.LENGTH_SHORT).show();
}
}
```
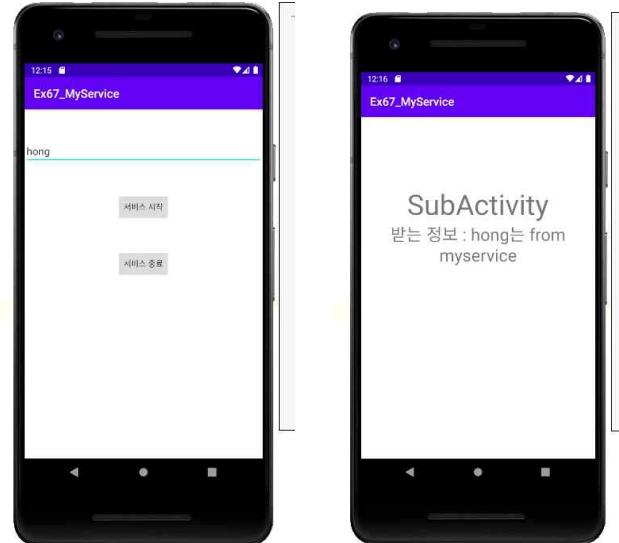
```java
public class MainActivity2 extends AppCompatActivity {
TextView result;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main2);
result = findViewById(R.id.result);

// 서비스에서 넘어온 intent 받기
Intent intent = getIntent();
String msg = intent.getStringExtra("msg");
result.append(msg);
}
}
```

```java
// 서비스 클래스를 만들기 위해서는 반드시 Service를 상속 받아야 한다.
// 메니페스트에 등록해야 한다.
// 3가지 메소드를 호출 해서 사용한다.
// MainActivity에소 startService(intent)를 시행하면
// 서비스 클래스에서 onCreate() =>  onStartCommand() 실행됨
// 서비스를 종료할때 onDestroy() 를 실행한다.

public class MyService extends Service {

@Override
public void onCreate() {
super.onCreate();
Log.d("my","onCreate()");
}

@Override
public int onStartCommand(Intent intent, int flags, int startId) {
Log.d("my","onStartCommand()");
processCommand(intent);
return super.onStartCommand(intent, flags, startId);
}

public void processCommand(Intent intent){
String msg = intent.getStringExtra("msg");
// 약 5초 지연 시킴
try {
Thread.sleep(5000);
}catch (Exception e){
}

// MainActivity(메모리에 존재하는 Activity)로
// 갈 경우 MainAcitivyt의 onNewIntent()로 간다.
// Intent goIntent = new Intent(getApplicationContext(),
MainActivity.class);

// MainActivity2(메모리에 존재하지 않는 Activity)로
// 갈 경우  MainActivity2의 onCreate()로 간다.
Intent goIntent = new Intent(getApplicationContext(), MainActivity2.class);

goIntent.addFlags(Intent.FLAG_ACTIVITY_NEW_TASK |
Intent.FLAG_ACTIVITY_CLEAR_TOP|
Intent.FLAG_ACTIVITY_SINGLE_TOP);
goIntent.putExtra("msg", msg +"는 from myservice");
startActivity(goIntent);
}

// 서비스 종료
@Override
public void onDestroy() {
super.onDestroy();
Log.d("my","onDestroy()");
}

@Nullable
@Override
public IBinder onBind(Intent intent) {
return null;
}
}
```
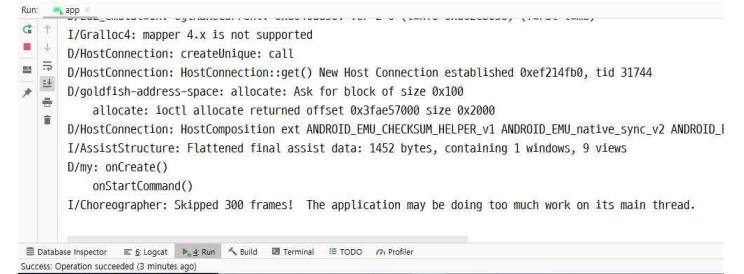
```
Run:    app
    I/Gralloc4: mapper 4.x is not supported
    D/HostConnection: createUnique: call
    D/HostConnection: HostConnection::get() New Host Connection established 0xef214fb0, tid 31744
    D/goldfish-address-space: allocate: Ask for block of size 0x100
        allocate: ioctl allocate returned offset 0x3fae57000 size 0x2000
    D/HostConnection: HostComposition ext ANDROID_EMU_CHECKSUM_HELPER_v1 ANDROID_EMU_native_sync_v2 ANDROID_
    I/AssistStructure: Flattened final assist data: 1452 bytes, containing 1 windows, 9 views
    D/my: onCreate()
        onStartCommand()
    I/Choreographer: Skipped 300 frames!  The application may be doing too much work on its main thread.

Database Inspector    Logcat    Run    Build    Terminal    TODO    Profiler
Success: Operation succeeded (3 minutes ago)
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.ict.ex67_myservice">

<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="true"
android:theme="@style/AppTheme">
<activity android:name=".MainActivity2"></activity>
<activity android:name=".MainActivity">
<intent-filter>
<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
<service android:name=".MyService"
android:enabled="true"
android:exported="true" />
</application>

</manifest>
```

// 서비스 클래스를 만들기 위해서는 반드시 Service를 상속 받아야 한다.