**Task #1:**

**Implement Bound Service**

# XML FILE :

*<?*xml version="1.0" encoding="utf-8"*?>*

<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools"

xmlns:app="http://schemas.android.com/apk/res-auto"

android:layout\_width="match\_parent"

android:orientation="vertical"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<LinearLayoutandroid:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textAlignment="center"

android:paddingTop="200dp"

android:layout\_gravity="center|center\_horizontal"

>

<EditTextandroid:id="@+id/editText2"

android:layout\_margin="5px"

android:layout\_width="150dp"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName" />

<TextViewandroid:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="+" android:padding="10dp"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<EditTextandroid:id="@+id/editText1"

android:layout\_margin="5px"

android:layout\_width="150dp"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName" />

</LinearLayout>

<Button

android:id="@+id/button3" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Answer "

/>

<LinearLayout

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:textAlignment="center" android:paddingTop="200dp" android:layout\_gravity="center|center\_horizontal"

>

<EditTextandroid:id="@+id/editText5" android:layout\_margin="5px" android:layout\_width="150dp" android:layout\_height="wrap\_content" android:ems="10" android:text="5" android:textAlignment="center"

android:inputType="textPersonName" />

</LinearLayout>

</LinearLayout>

**JAVA**

package com.example.lab9;

import android.content.ComponentName; import android.content.Context; import android.content.Intent; import android.content.ServiceConnection; import android.os.IBinder;

import android.support.v7.app.AppCompatActivity; import android.os.Bundle; import android.view.View; import android.widget.EditText; import android.widget.TextView;

import android.widget.Toast;

import com.example.myapplication.R;

public class MainActivity extends AppCompatActivity {

MyServicemyservice; boolean bound=false;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

}

@Override

protected void onStart()

{

super.onStart();

Intent i=new Intent(getApplicationContext(),MyService.class);

bindService(i,connection, Context.*BIND\_AUTO\_CREATE*);

}

@Override protected void onStop()

{

super.onStop();

if(bound)

{

unbindService(connection);

bound=false;

}

}

private ServiceConnection connection=new ServiceConnection()

{

@Override

public void onServiceConnected(ComponentName name, IBinder service) { MyService.LocalBinder binder=(MyService.LocalBinder) service;

myservice=binder.getService(); bound=true;

}

@Override

public void onServiceDisconnected(ComponentName name) { bound=false;

}

};

public void calculate(View view)

{

if(bound)

{

EditText a=findViewById(R.id.a);

EditText b=findViewById(R.id.b); TextViewans=findViewById(R.id.answer); int aa=Integer.*parseInt*(a.getText().toString()); int bb=Integer.*parseInt*(b.getText().toString()); int num=myservice.calculate(aa,bb);

ans.setText(num);

Toast.*makeText*(this,num,Toast.*LENGTH\_LONG*).show();

}

}

}

