**Problem statement : Create an application using 2 Fragments in a Single Activity and pass data from one fragment to another.**

**MainActivity.java**

package com.example.exp5;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

import androidx.fragment.app.FragmentTransaction;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

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

FragmentTransaction fragmentTransaction = getSupportFragmentManager().beginTransaction();

fragmentTransaction.replace(R.id.*MainLayout*,new Fragment1());

fragmentTransaction.commit();

}

}

**activity\_main.xml**

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

<androidx.constraintlayout.widget.ConstraintLayout 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:id="@+id/MainLayout"

tools:context=".MainActivity">

</androidx.constraintlayout.widget.ConstraintLayout>

**Fragment1.java**

package com.example.exp5;

import android.os.Bundle;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

import android.widget.Button;

import android.widget.EditText;

import androidx.fragment.app.Fragment;

import androidx.fragment.app.FragmentTransaction;

public class Fragment1 extends Fragment {

EditText txt1,txt2;

Button b1;

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanced)

{

View view = inflater.inflate(R.layout.*activity\_fragment1*,container,false);

txt1=view.findViewById(R.id.*txt1*);

txt2=view.findViewById(R.id.*txt2*);

b1=view.findViewById(R.id.*button*);

b1.setOnClickListener(view1 -> {

String F\_name = txt1.getText().toString();

String L\_name = txt2.getText().toString();

Bundle bundle = new Bundle();

bundle.putString("first",F\_name);

bundle.putString("last",L\_name);

Fragment2 fragInfo = new Fragment2();

fragInfo.setArguments(bundle);

FragmentTransaction fragmentTransaction = requireActivity().getSupportFragmentManager().beginTransaction();

fragmentTransaction.replace(R.id.*MainLayout*,fragInfo);

fragmentTransaction.commit();

b1.setOnClickListener(view2 -> {

});

});

return view;

}

}

**activity\_fragment1.xml**

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

<androidx.constraintlayout.widget.ConstraintLayout 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=".Fragment1">

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="This a First Fragment"

android:textColor="#000"

android:textSize="20sp"

android:textStyle="bold"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.139" />

<EditText

android:id="@+id/txt1"

android:layout\_width="312dp"

android:layout\_height="55dp"

android:hint="enter your first name"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.495"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.304" />

<EditText

android:id="@+id/txt2"

android:layout\_width="312dp"

android:layout\_height="55dp"

android:hint="enter your last name"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.494"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.465" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Submit"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.632" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Fragment2.java**

package com.example.exp5;

import android.os.Bundle;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

import android.widget.TextView;

import androidx.fragment.app.Fragment;

public class Fragment2 extends Fragment {

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container,Bundle savedInstanced)

{

View view = inflater.inflate(R.layout.*activity\_fragment2*,container,false);

Bundle bundle = getArguments();

if(bundle!=null)

{

String first = bundle.getString("first");

String last = bundle.getString("last");

TextView first1 = view.findViewById(R.id.*txt1*);

TextView last1 = view.findViewById(R.id.*txt2*);

first1.setText(first);

last1.setText(last);

}

return view;

}

}

**activity\_fragment2.xml**

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

<androidx.constraintlayout.widget.ConstraintLayout 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=".Fragment2">

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="This a Second Fragment"

android:textColor="#000"

android:textSize="20sp"

android:textStyle="bold"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.139" />

<TextView

android:id="@+id/txt1"

android:layout\_width="312dp"

android:layout\_height="55dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.495"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.304" />

<TextView

android:id="@+id/txt2"

android:layout\_width="312dp"

android:layout\_height="55dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.494"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.465" />

</androidx.constraintlayout.widget.ConstraintLayout>