PRACTICAL 4(B)

Aim: **Create android application to create two fragment and two button on main activity. One clicks of first button display first fragment and on click of second button display second fragment**

Code:
JAVA FILE: (MainActivity.java)

```java
package com.example.practical4b;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
    private Button hiButton;
    private Button helloButton;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        hiButton = findViewById(R.id.firstButton);
        helloButton = findViewById(R.id.secondButton);
        hiButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                displayFragment(new FirstFragment());
            }
        });
        helloButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                displayFragment(new SecondFragment());
            }
        });
    }
    private void displayFragment(Fragment fragment) {
        FragmentManager fragmentManager = getSupportFragmentManager();
        FragmentTransaction transaction = fragmentManager.beginTransaction();
        transaction.replace(R.id.fragmentContainer, fragment);
```

```java
        transaction.addToBackStack(null); // Optional, for back navigation
        transaction.commit();
    }
}
```

JAVA FILE: (FirstFragment.java)

```java
package com.example.practical4b;
import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import androidx.fragment.app.Fragment;
public class FirstFragment extends Fragment {
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle
savedInstanceState) {
        return inflater.inflate(R.layout.fragment_first, container, false);
    }
}
```

JAVA FILE: (SecondFragment.java)

```java
package com.example.practical4b;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
public class SecondFragment extends Fragment {
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle
savedInstanceState) {
        return inflater.inflate(R.layout.fragment_second, container, false);
    }
}
```

XML FILE: (activity_main.xml)

```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=".MainActivity">
    <TextView
```

```xml
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:text=" Name: Angat Shah \n Enrollment No: 202203103510097 \n Branch:
B.Tech CSE"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:ignore="MissingConstraints" />
    <Button
        android:id="@+id/firstButton"
        android:layout_width="250dp"
        android:layout_height="wrap_content"
        android:text="Display First Fragment"
        android:textSize="17dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/textView"
        app:layout_constraintVertical_bias="0.250" />
    <Button
        android:id="@+id/secondButton"
        android:layout_width="250dp"
        android:layout_height="wrap_content"
        android:text="Display Second Fragment"
        android:textSize="17dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/firstButton"
        app:layout_constraintVertical_bias="0.200" />
    <FrameLayout
        android:id="@+id/fragmentContainer"
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:layout_weight="1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/secondButton"
        tools:ignore="MissingConstraints" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

XML FILE: (fragment_first.xml)

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="FRAGMENT 1"
        android:textStyle="bold"
        android:textSize="40dp"
        android:gravity="center"/>
</androidx.constraintlayout.widget.ConstraintLayout>
```

XML FILE: (fragment_second.xml)

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="FRAGMENT 2"
        android:textStyle="bold"
        android:textSize="40dp"
        android:gravity="center"/>
</androidx.constraintlayout.widget.ConstraintLayout>
```

Enrollment No: 202203103510097

Output: