Experiment No.: 16

Aim

Develop application using Fragments

CO4

Implement activities with dialogs, spinner, fragments and navigation drawer by applying themes

Procedure

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"
    android:background="@color/purple_700"
    tools:context=".MainActivity">
    <Button
        android:id="@+id/btn2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="40dp"
        android:layout_marginEnd="40dp"
        android:text="Fragment-two"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toEndOf="@+id/btn1"
```

```
    app:layout_constraintTop_toTopOf="parent" />

  <Button

    android:id="@+id/btn1"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:layout_marginTop="40dp"

    android:layout_marginEnd="16dp"

    android:text="Fragment-one"

    app:layout_constraintEnd_toStartOf="@+id/btn2"

    app:layout_constraintHorizontal_bias="0.5"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toTopOf="parent" />

  <FrameLayout

    android:id="@+id/frid"

    android:layout_width="409dp"

    android:layout_height="629dp"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintTop_toBottomOf="@+id/btn2">

  </FrameLayout>

</androidx.constraintlayout.widget.ConstraintLayout>
```

fragment_first.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=".FirstFragment">

  <TextView

     android:id="@+id/tvfrag"

     android:layout_width="wrap_content"

     android:layout_height="wrap_content"

     android:text="First fragment"

     android:textColor="#5E0000"

     android:textSize="36dp"

     app:layout_constraintBottom_toBottomOf="parent"

     app:layout_constraintEnd_toEndOf="parent"

     app:layout_constraintHorizontal_bias="0.5"

     app:layout_constraintStart_toStartOf="parent"

     app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

fragment_second.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=".SecondFragment">

  <TextView

     android:id="@+id/secondtv"

     android:layout_width="wrap_content"

     android:layout_height="wrap_content"

     android:text="Second Fragment"

     android:textColor="#001165"
```

```
    android:textSize="36dp"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintHorizontal_bias="0.5"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.fragment;

import androidx.appcompat.app.AppCompatActivity;

import androidx.fragment.app.Fragment;

import androidx.fragment.app.FragmentManager;

import androidx.fragment.app.FragmentTransaction;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        Button btn1= (Button) findViewById(R.id.btn1);

        Button btn2= (Button) findViewById(R.id.btn2);

        btn1.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View view) {

                loadFragment(new FirstFragment());

            }
```

```java
    });

    btn2.setOnClickListener(new View.OnClickListener() {

        @Override

        public void onClick(View view) {

            loadFragment(new SecondFragment());

        }

    });

}

private void loadFragment(Fragment f) {

    FragmentManager fm = getSupportFragmentManager();

    FragmentTransaction ft = fm.beginTransaction();

    ft.replace(R.id.frid,f);

    ft.commit();

}
}
```
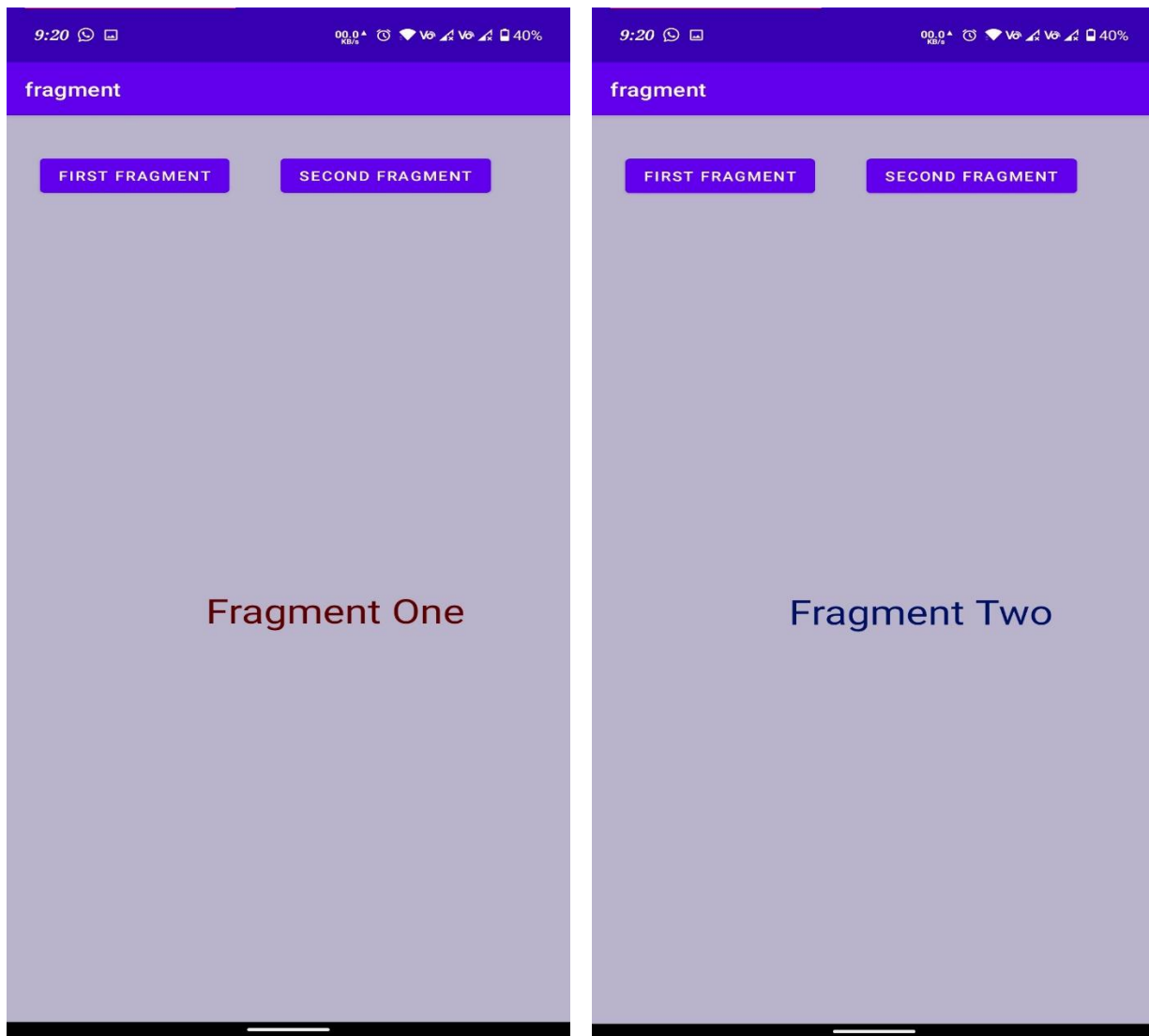
FirstFragment.java

```java
package com.example.fragment;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

public class FirstFragment extends Fragment {

    View view;

    @Override

    public View onCreateView(LayoutInflater inflater, ViewGroup container,

                    Bundle savedInstanceState) {

        // Inflate the layout for this fragment
```

```java
        return view = inflater.inflate(R.layout.fragment_first, container, false);
    }
}
```

SecondFragment.java

```java
package com.example.fragment;

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 {

View view;

    @Override

    public View onCreateView(LayoutInflater inflater, ViewGroup container,

                    Bundle savedInstanceState) {

        // Inflate the layout for this fragment

        return view = inflater.inflate(R.layout.fragment_second, container, false);

    }

}
```

Output Screenshot

Result

The program was executed and the result was successfully obtained. Thus CO4 was obtained.

Experiment No.: 17