```
3.Demonstrate adding and removing fragment at run time.
Step-1: create a new project (Program-3)
Step-2:create first fragment(FirstFragment)
Go to->File->New->Fragment->Fragment(Blank)
No need to change FirstFragment.java file.
Only we need to change xml file.
Step-3:create first fragment(SecondFragment)
Go to->File->New->Fragment->Fragment(Blank)
No need to change SecondFragment.java file.
Only we need to change xml file.
```

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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">
    <FrameLayout</pre>
        android:id="@+id/frameLayout"
        android:layout width="391dp"
        android:layout height="374dp"
        app:layout constraintBottom toBottomOf="parent"
        app:layout constraintEnd toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="0.134">
    </FrameLayout>
    <Button
        android:id="@+id/button"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android: text="Click"
        app:layout constraintBottom toBottomOf="parent"
        app:layout constraintEnd toEndOf="parent"
        app:layout constraintHorizontal bias="0.498"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toBottomOf="@+id/frameLayout"
        app:layout constraintVertical bias="0.475" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Fragment_first.xml

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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"
    tools:context=".FirstFragment">

    <!-- TODO: Update blank fragment layout -->
    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:gravity="center_horizontal"
        android:text="This is first fragnment"
        android:textAlignment="center"
        android:textSize="34sp" />

</FrameLayout>
```

Fragment_second.xml:-

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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"
    tools:context=".SecondFragment">

    <!-- TODO: Update blank fragment layout -->
    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="This is Second fragment"
        android:textSize="34sp"
        android:textAlignment="center"
        android:gravity="center_horizontal" />

</FrameLayout>
```

MainActivity.java:-

```
package com.durgesh.program_3;

import androidx.appcompat.app.AppCompatActivity;
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 {
    FirstFragment firstFragment;
    SecondFragment secondFragment;
    int showingFragment=0;
    Button b1;
@Override
protected void onCreate(Bundle savedInstanceState) {
  super.onCreate(savedInstanceState);
  setContentView(R.layout.activity main);
  b1=findViewById(R.id.button);
  firstFragment=new FirstFragment();
  secondFragment=new SecondFragment();
  FragmentManager fragmentManager=getSupportFragmentManager();
  FragmentTransaction fragmentTransaction=fragmentManager.beginTransaction();
  fragmentTransaction.add(R.id.frameLayout, firstFragment);
  fragmentTransaction.commit();
  showingFragment=1;
b1.setOnClickListener(new View.OnClickListener() {
  @Override
  public void onClick(View view) {
  FragmentManager fragmentManager=getSupportFragmentManager();
  FragmentTransaction fragmentTransaction=fragmentManager.beginTransaction();
  if (showingFragment==1)
     fragmentTransaction.replace(R.id.frameLayout, secondFragment);
     showingFragment=2;
    }
  else
     fragmentTransaction.replace(R.id.frameLayout, firstFragment);
     showingFragment=1;
     fragmentTransaction.commit();
        });
    }
}
```

