**ASSIGNMENT 3 :TABLAYOUT**

XML CODE:

1. MAIN ACTIVITY:

*<?***xml version="1.0" encoding="utf-8"***?>*<**android.support.design.widget.CoordinatorLayoutxmlns: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:id="@+id/main\_content"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
android:fitsSystemWindows="true"  
tools:context=".MainActivity"**>  
  
<**android.support.design.widget.AppBarLayout  
android:id="@+id/appbar"  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:paddingTop="@dimen/appbar\_padding\_top"  
android:background="#009688"  
android:theme="@style/AppTheme.AppBarOverlay"**>  
  
<**android.support.v7.widget.Toolbar  
android:id="@+id/toolbar"  
android:layout\_width="match\_parent"  
android:layout\_height="?attr/actionBarSize"  
android:layout\_weight="1"  
android:background="#009688"  
app:layout\_scrollFlags="scroll|enterAlways"  
app:popupTheme="@style/AppTheme.PopupOverlay"  
app:title="@string/app\_name"**>  
  
</**android.support.v7.widget.Toolbar**>  
  
<**android.support.design.widget.TabLayout  
android:id="@+id/tabs"  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"**>  
  
<**android.support.design.widget.TabItem  
android:id="@+id/tabItem"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="@string/tab\_text\_1"** />  
  
<**android.support.design.widget.TabItem  
android:id="@+id/tabItem2"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="@string/tab\_text\_2"** />  
  
<**android.support.design.widget.TabItem  
android:id="@+id/tabItem3"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="@string/tab\_text\_3"** />  
  
</**android.support.design.widget.TabLayout**>  
</**android.support.design.widget.AppBarLayout**>  
  
<**android.support.v4.view.ViewPager  
android:id="@+id/container"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
app:layout\_behavior="@string/appbar\_scrolling\_view\_behavior"** />  
  
<**android.support.design.widget.FloatingActionButton  
android:id="@+id/fab"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_gravity="end|bottom"  
android:layout\_margin="@dimen/fab\_margin"  
app:srcCompat="@android:drawable/ic\_dialog\_email"** />  
  
</**android.support.design.widget.CoordinatorLayout**>

1. FRAGMENT 1:

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayoutxmlns:android="http://schemas.android.com/apk/res/android"  
android:layout\_width="match\_parent"  
android:layout\_margin="15dp"  
android:layout\_height="match\_parent"  
android:background="@color/Black"  
android:orientation="vertical"**>  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
android:layout\_margin="5dp"  
android:background="#00BCD4"  
android:orientation="vertical"**>  
  
<**TextView  
android:id="@+id/tv1"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/test"  
android:textColor="@color/Sienna"  
android:textSize="30dp"** />  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginTop="30dp"  
android:orientation="horizontal"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_gravity="left"  
android:layout\_margin="15dp"  
android:fontFamily="serif"  
android:gravity="left"  
android:text="@string/exam2"** />  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_gravity="right"  
android:layout\_marginEnd="10dp"  
android:layout\_marginTop="15dp"  
android:fontFamily="serif"  
android:gravity="right"  
android:text="@string/exam3"** />  
  
</**LinearLayout**>  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginTop="20dp"  
android:orientation="horizontal"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:fontFamily="serif"  
android:text="@string/exam4"** />  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginStart="170dp"  
android:layout\_marginTop="15dp"  
android:fontFamily="serif"  
android:text="@string/exam5"** />  
  
</**LinearLayout**>  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginTop="20dp"  
android:orientation="horizontal"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:fontFamily="serif"  
android:text="@string/exam6"** />  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginStart="130dp"  
android:layout\_marginTop="15dp"  
android:fontFamily="serif"  
android:text="@string/exam7"** />  
  
</**LinearLayout**>  
  
<**LinearLayout  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_marginTop="20dp"  
android:orientation="horizontal"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:fontFamily="serif"  
android:text="@string/exam8"** />  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginStart="230dp"  
android:layout\_marginTop="15dp"  
android:fontFamily="serif"  
android:text="@string/exam9"** />  
  
</**LinearLayout**>  
  
<**LinearLayout  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_marginTop="20dp"  
android:orientation="horizontal"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:fontFamily="serif"  
android:text="@string/exam10"** />  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:layout\_marginStart="240dp"  
android:layout\_marginTop="15dp"  
android:fontFamily="serif"  
android:text="@string/exam11"** />  
  
</**LinearLayout**>  
  
</**LinearLayout**>  
  
</**LinearLayout**>

1. FRAMGMENT 2:

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollViewxmlns:android="http://schemas.android.com/apk/res/android"  
android:layout\_width="match\_parent"  
android:layout\_margin="15dp"  
android:layout\_height="match\_parent"  
android:background="@color/Black"  
android:orientation="vertical"**>  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
android:layout\_margin="5dp"  
android:background="#00BCD4"  
android:orientation="vertical"**>  
  
<**TextView  
android:id="@+id/tv1"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course"  
android:textColor="@color/SeaGreen"  
android:textSize="25dp"** />  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:orientation="vertical"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course1"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course1\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"**/>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course2"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course2\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course3"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course3\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course4"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course4\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="142dp"** />  
  
  
</**LinearLayout**>  
  
</**LinearLayout**>  
  
</**ScrollView**>

1. Fragment 3:

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollViewxmlns:android="http://schemas.android.com/apk/res/android"  
android:layout\_width="match\_parent"  
android:layout\_margin="15dp"  
android:layout\_height="match\_parent"  
android:background="@color/Black"  
android:orientation="vertical"**>  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
android:layout\_margin="5dp"  
android:background="#00BCD4"  
android:orientation="vertical"**>  
  
<**TextView  
android:id="@+id/tv1"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course"  
android:textColor="@color/SeaGreen"  
android:textSize="25dp"** />  
  
<**LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:orientation="vertical"**>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course1"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course1\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"**/>  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course2"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course2\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course3"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course3\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
  
android:fontFamily="serif"  
android:text="@string/course4"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
<**TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_margin="15dp"  
android:layout\_marginTop="30dp"  
android:fontFamily="serif"  
android:text="@string/course4\_details"  
android:textColor="@color/Black"  
android:textSize="15dp"** />  
  
  
<**TextView  
android:layout\_width="match\_parent"  
android:layout\_height="142dp"** />  
  
  
</**LinearLayout**>  
  
</**LinearLayout**>  
  
</**ScrollView**>

JAVA CODE:

**package** com.example.yuvasriraghavan.assignment3\_1;  
  
**import** android.support.design.widget.TabLayout;  
**import** android.support.design.widget.FloatingActionButton;  
**import** android.support.design.widget.Snackbar;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.support.v7.widget.Toolbar;  
  
**import** android.support.v4.app.Fragment;  
**import** android.support.v4.app.FragmentManager;  
**import** android.support.v4.app.FragmentPagerAdapter;  
**import** android.support.v4.view.ViewPager;  
**import** android.os.Bundle;  
**import** android.view.LayoutInflater;  
**import** android.view.Menu;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
  
**import** android.widget.TextView;  
  
**public class** MainActivity**extends** AppCompatActivity {  
  
  
*/\*\*  
 \* The {****@link*** *android.support.v4.view.PagerAdapter} that will provide  
 \* fragments for each of the sections. We use a  
 \* {****@link*** *FragmentPagerAdapter} derivative, which will keep every  
 \* loaded fragment in memory. If this becomes too memory intensive, it  
 \* may be best to switch to a  
 \* {****@link*** *android.support.v4.app.FragmentStatePagerAdapter}.  
 \*/***private** SectionsPagerAdapter**mSectionsPagerAdapter**;  
  
*/\*\*  
 \* The {****@link*** *ViewPager} that will host the section contents.  
 \*/***private** ViewPager**mViewPager**;  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.***activity\_main***);  
  
 Toolbar toolbar = (Toolbar) findViewById(R.id.***toolbar***);  
setSupportActionBar(toolbar);  
*// Create the adapter that will return a fragment for each of the three  
 // primary sections of the activity.***mSectionsPagerAdapter**= **new** SectionsPagerAdapter(getSupportFragmentManager());  
  
*// Set up the ViewPager with the sections adapter.***mViewPager**= (ViewPager) findViewById(R.id.***container***);  
**mViewPager**.setAdapter(**mSectionsPagerAdapter**);  
  
TabLayouttabLayout = (TabLayout) findViewById(R.id.***tabs***);  
tabLayout.setupWithViewPager(**mViewPager**);  
  
FloatingActionButton fab = (FloatingActionButton) findViewById(R .id.***fab***);  
fab.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
Snackbar.*make*(view, **"Would you like to mail us?"**, Snackbar.***LENGTH\_LONG***)  
 .setAction(**"Action"**, **null**).show();  
 }  
 });  
  
 }  
  
  
@Override  
**public boolean**onCreateOptionsMenu(Menu menu) {  
*// Inflate the menu; this adds items to the action bar if it is present.*getMenuInflater().inflate(R.menu.***menu\_main***, menu);  
**return true**;  
 }  
  
@Override  
**public boolean**onOptionsItemSelected(MenuItem item) {  
*// Handle action bar item clicks here. The action bar will  
 // automatically handle clicks on the Home/Up button, so long  
 // as you specify a parent activity in AndroidManifest.xml.***int** id = item.getItemId();  
  
*//noinspectionSimplifiableIfStatement***if** (id == R.id.***action\_settings***) {  
**return true**;  
 }  
  
**return super**.onOptionsItemSelected(item);  
 }  
  
*/\*\*  
 \* A placeholder fragment containing a simple view.  
 \*/***public static class** PlaceholderFragment**extends** Fragment {  
*/\*\*  
 \* The fragment argument representing the section number for this  
 \* fragment.  
 \*/***private static final** String ***ARG\_SECTION\_NUMBER*** = **"section\_number"**;  
  
**public** PlaceholderFragment() {  
 }  
  
*/\*\*  
 \* Returns a new instance of this fragment for the given section  
 \* number.  
 \*/***public static** PlaceholderFragmentnewInstance(**int** sectionNumber) {  
PlaceholderFragment fragment = **new** PlaceholderFragment();  
 Bundle args = **new** Bundle();  
args.putInt(***ARG\_SECTION\_NUMBER***, sectionNumber);  
fragment.setArguments(args);  
**return** fragment;  
 }  
  
@Override  
**public** View onCreateView(LayoutInflaterinflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 View rootView = inflater.inflate(R.layout.***fragment\_main***, container, **false**);  
TextViewtextView = (TextView) rootView.findViewById(R.id.***section\_label***);  
textView.setText(getString(R.string.***section\_format***, getArguments().getInt(***ARG\_SECTION\_NUMBER***)));  
**return** rootView;  
 }  
 }  
  
*/\*\*  
 \* A {****@link*** *FragmentPagerAdapter} that returns a fragment corresponding to  
 \* one of the sections/tabs/pages.  
 \*/***public class** SectionsPagerAdapter**extends** FragmentPagerAdapter {  
  
**public** SectionsPagerAdapter(FragmentManagerfm) {  
**super**(fm);  
 }  
  
@Override  
**public** Fragment getItem(**int** position) {  
 Fragment fragment = **null**;  
**switch** (position) {  
**case** 0:  
 fragment = **new** Frag1();  
**break**;  
**case** 1:  
 fragment = **new** Frag2();  
**break**;  
**case** 2:  
 fragment = **new** Frag3();  
**break**;  
 }  
**return** fragment;  
 }  
  
@Override  
**public int** getCount() {  
*// Show 3 total pages.***return** 3;  
 }  
  
@Override  
**public** CharSequencegetPageTitle(**int** position) {  
**switch** (position) {  
**case** 0:  
**return "EXAM"**;  
**case** 1:  
**return "CONTENTS"**;  
**case** 2:  
**return "PRACTICAL"**;  
 }  
**return null**;  
 }  
 }  
}

SCREENSHOTS:



