Practical File

Mobile Application Development Laboratory

Subject Code – DEIT-14712

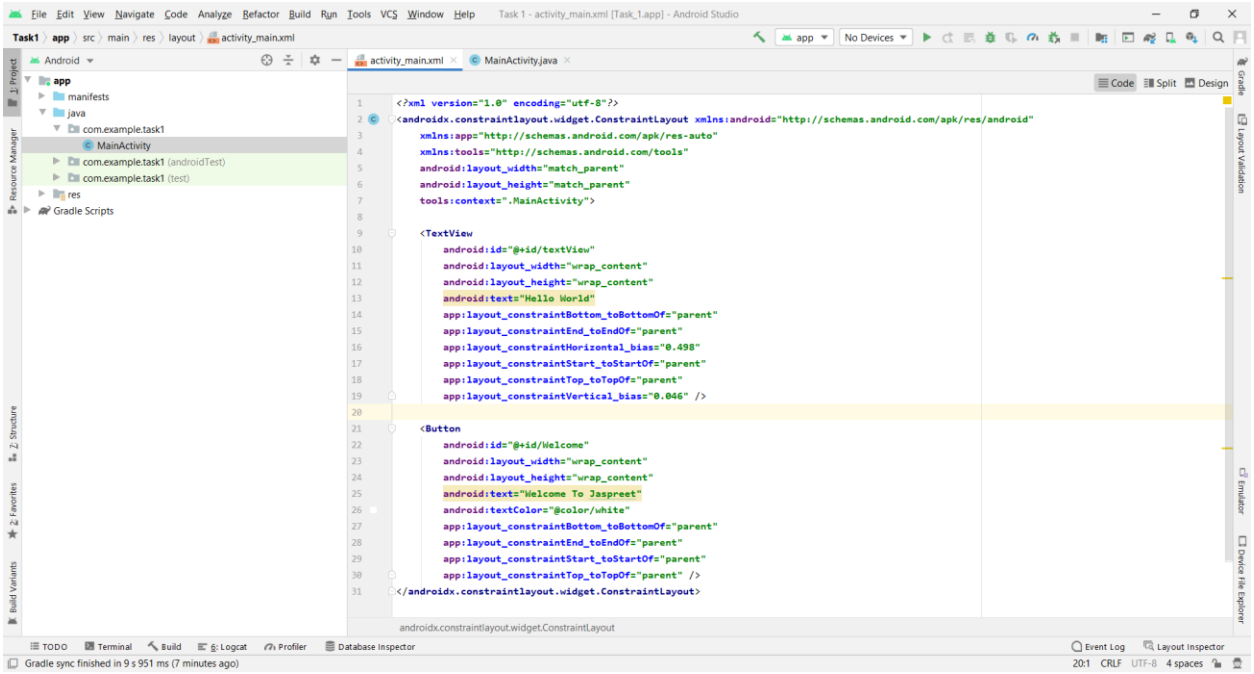
Submitted By

Jaspreet Kaur (1706861)

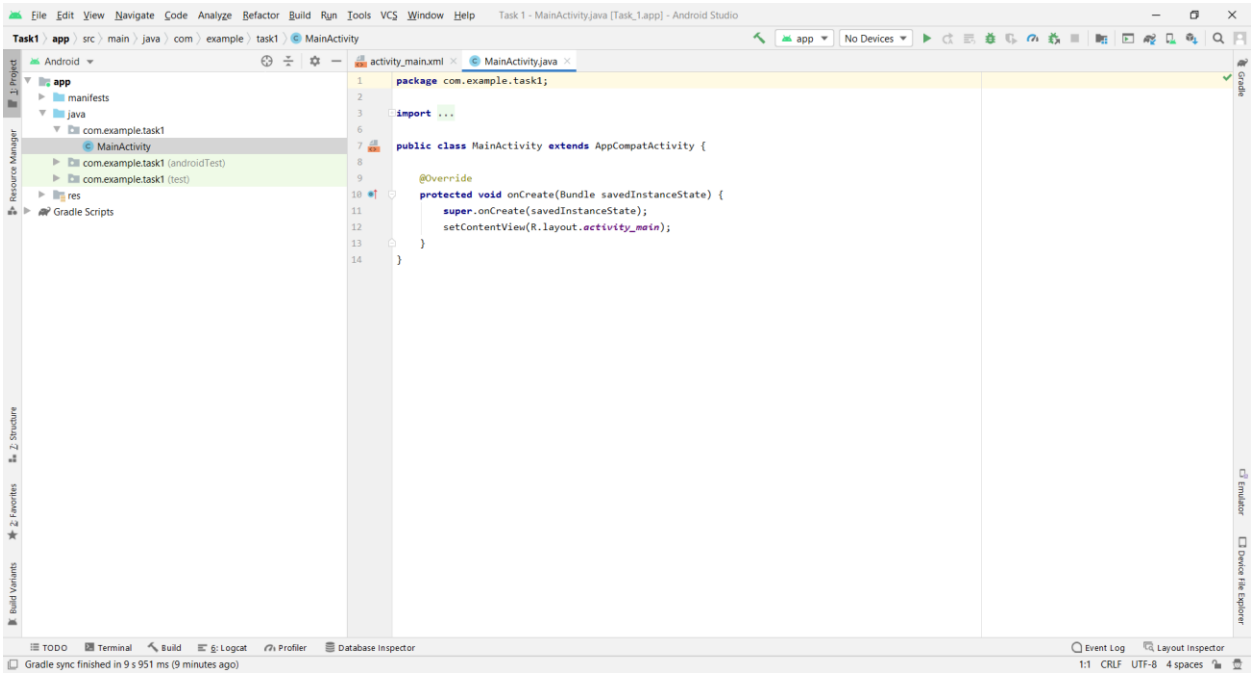
Section: D4 I.T.(A2)

Practical 1:- Create a first app on Android

Xml File



Java File



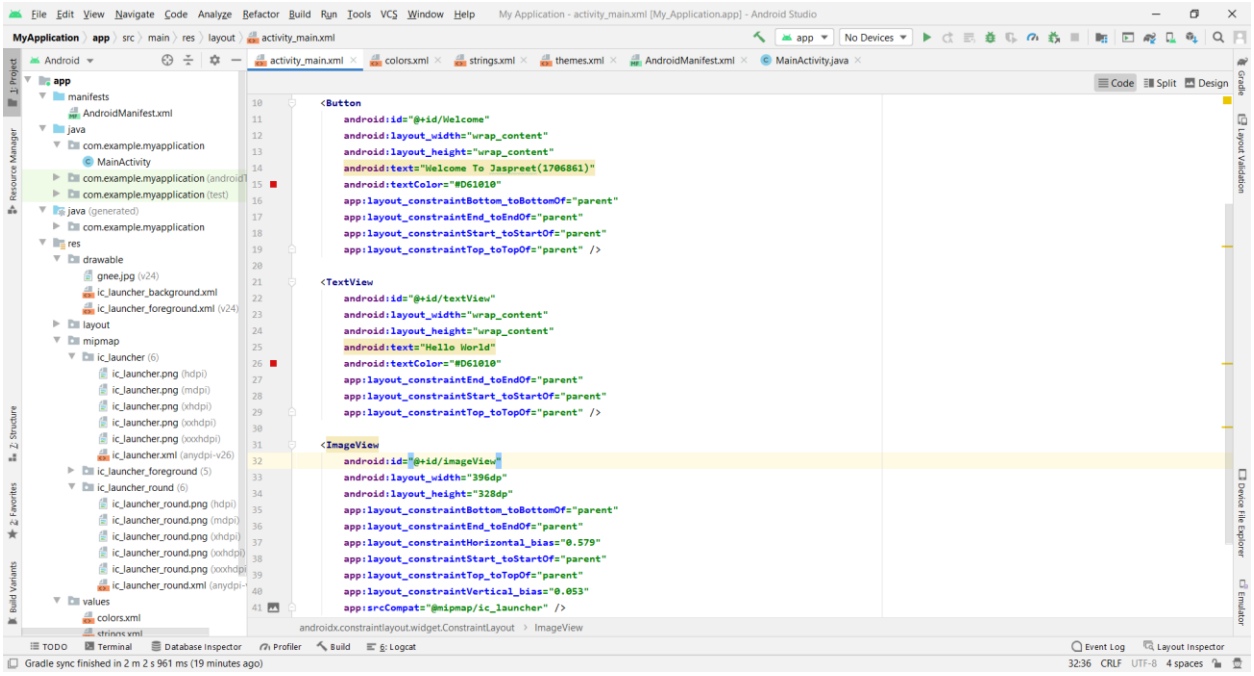
OUTPUT:-


2:20 PM | 0.0KB/s
My Application
Hello World

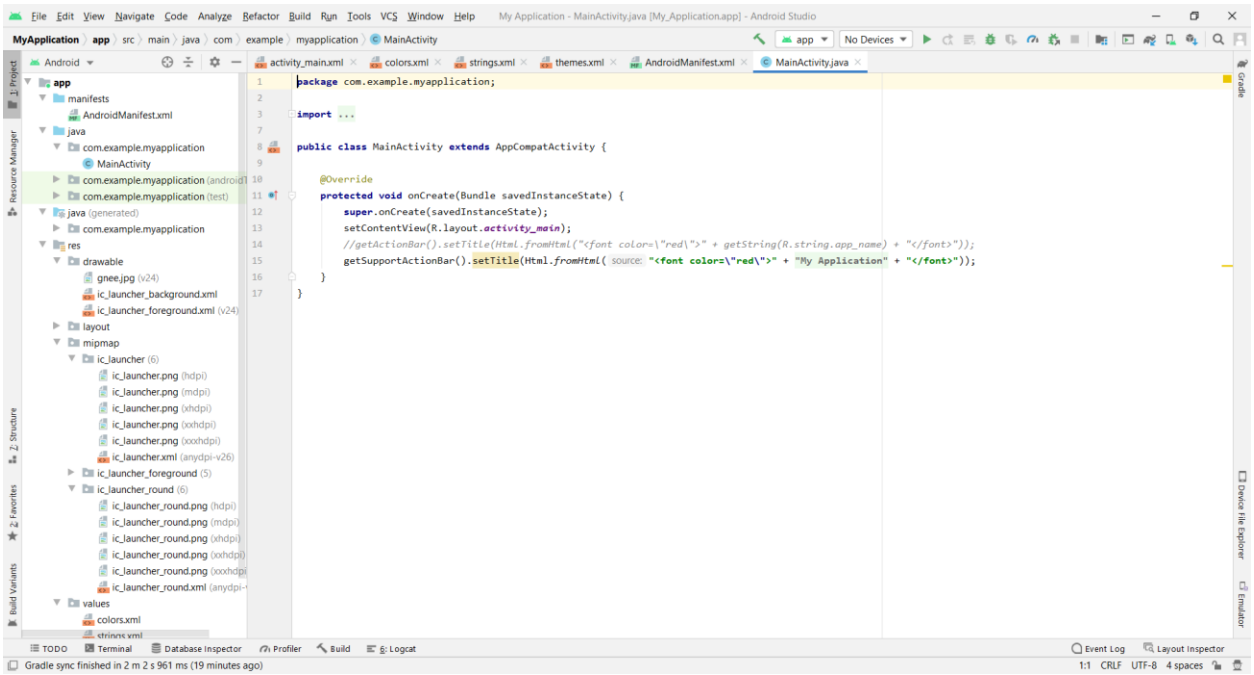

WELCOME TO JASPREET

Practical 2:- Create icon of app, change the label Background

Xml File



Java File:-

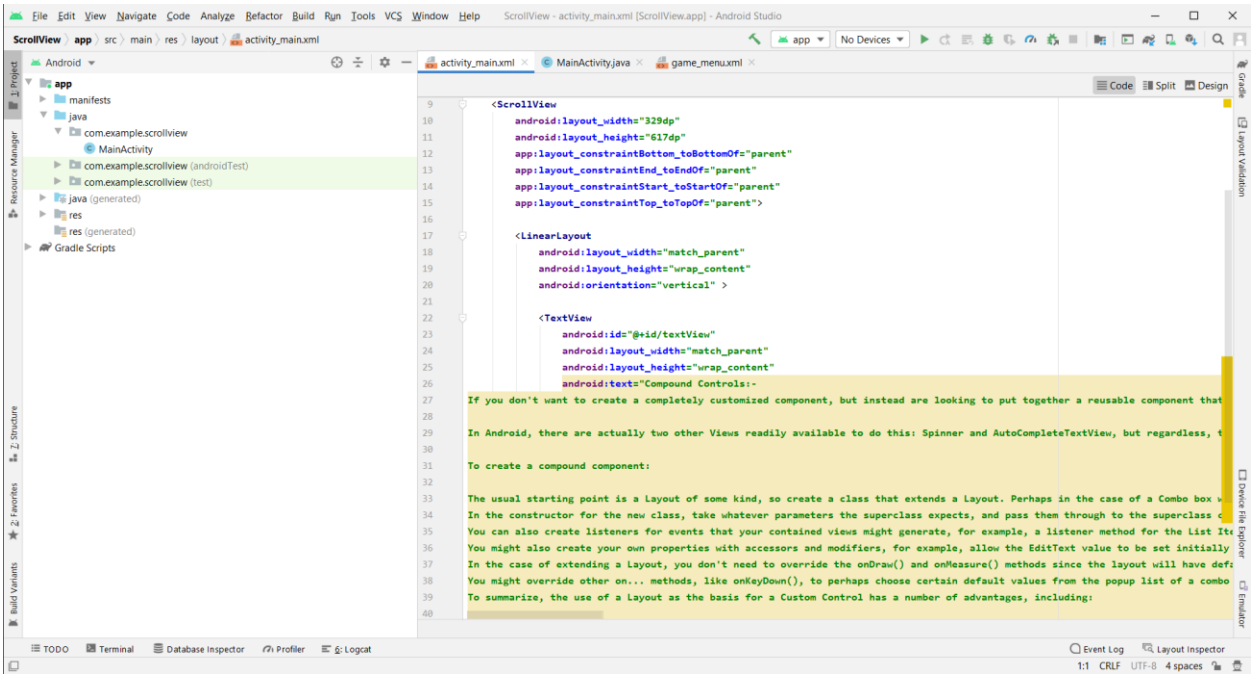


OUTPUT:-

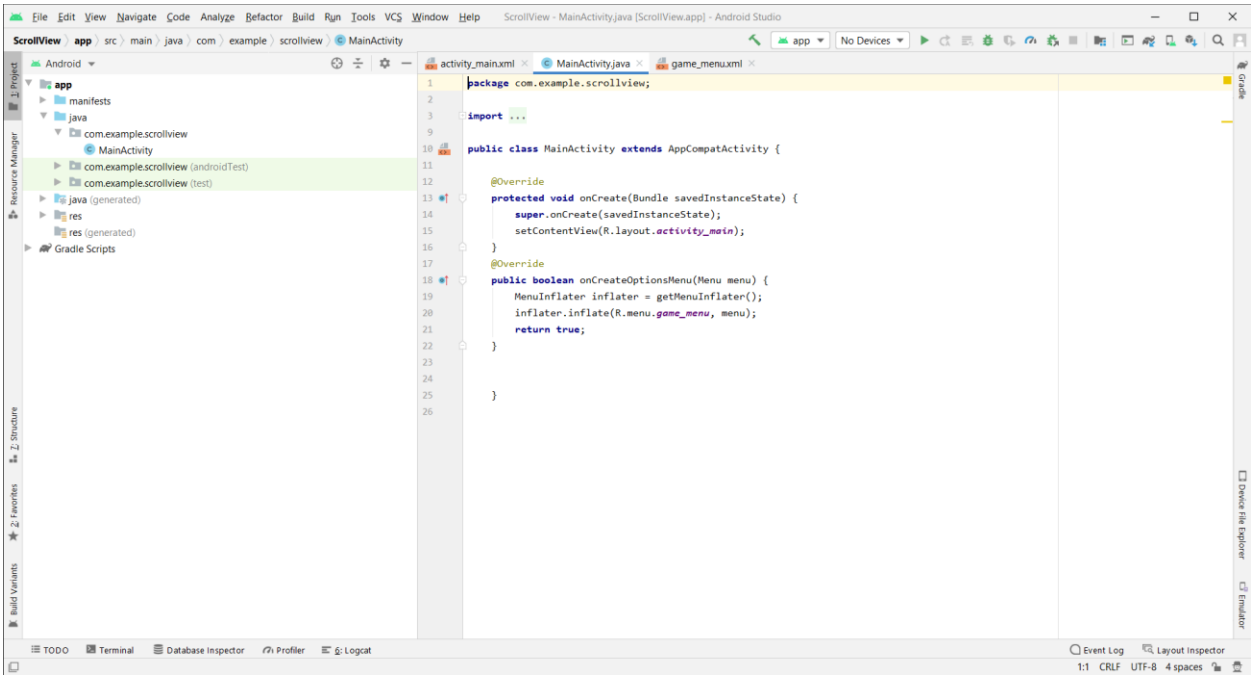

My Application
Hello World
GURU NANAK DEV
1956
WELCOME TO JASPREET(1706861)

Practical 3:- Create the menu, Buttons and ScrollView in an Application

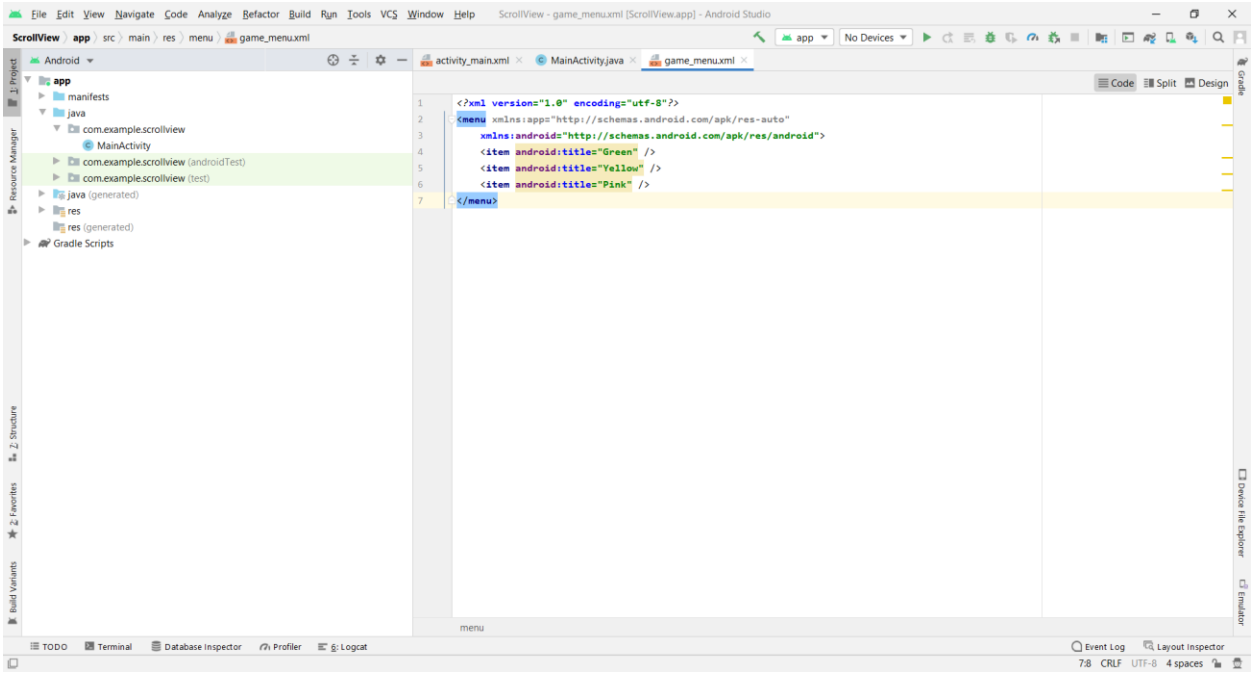
Xml File:-



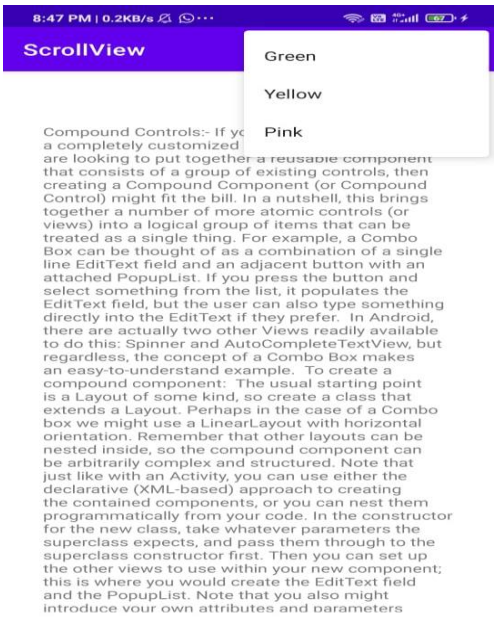
Java File:-



Menu File:

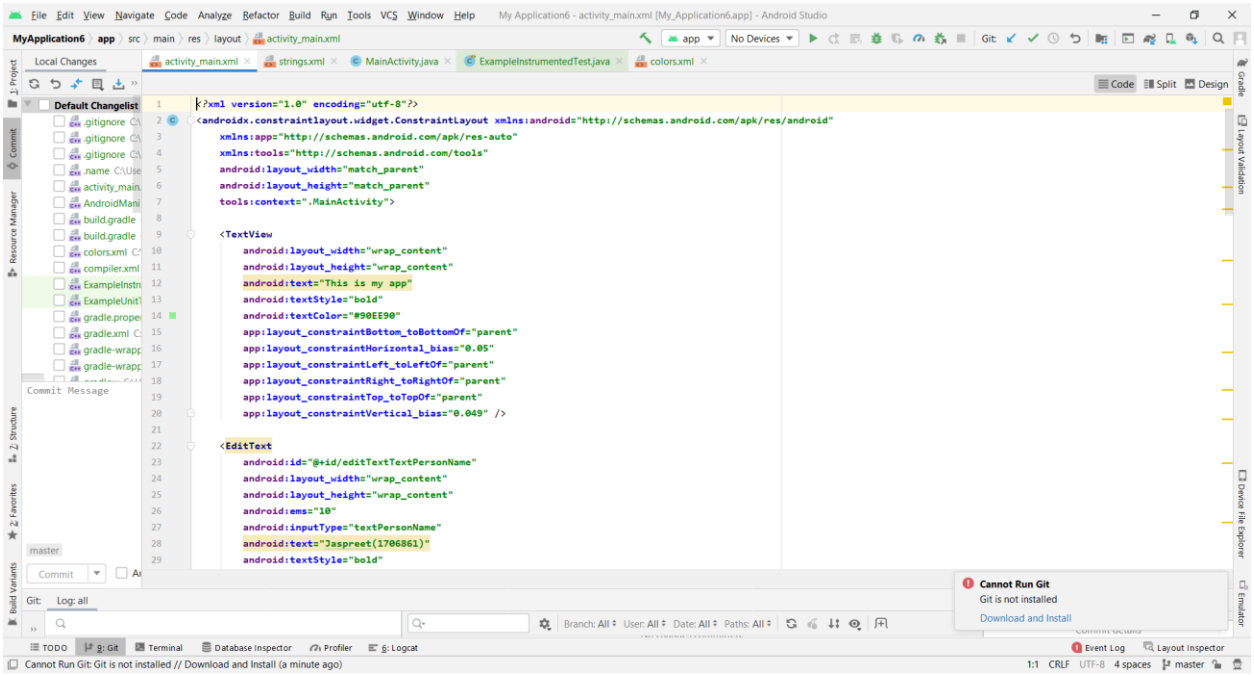


OUTPUT:-

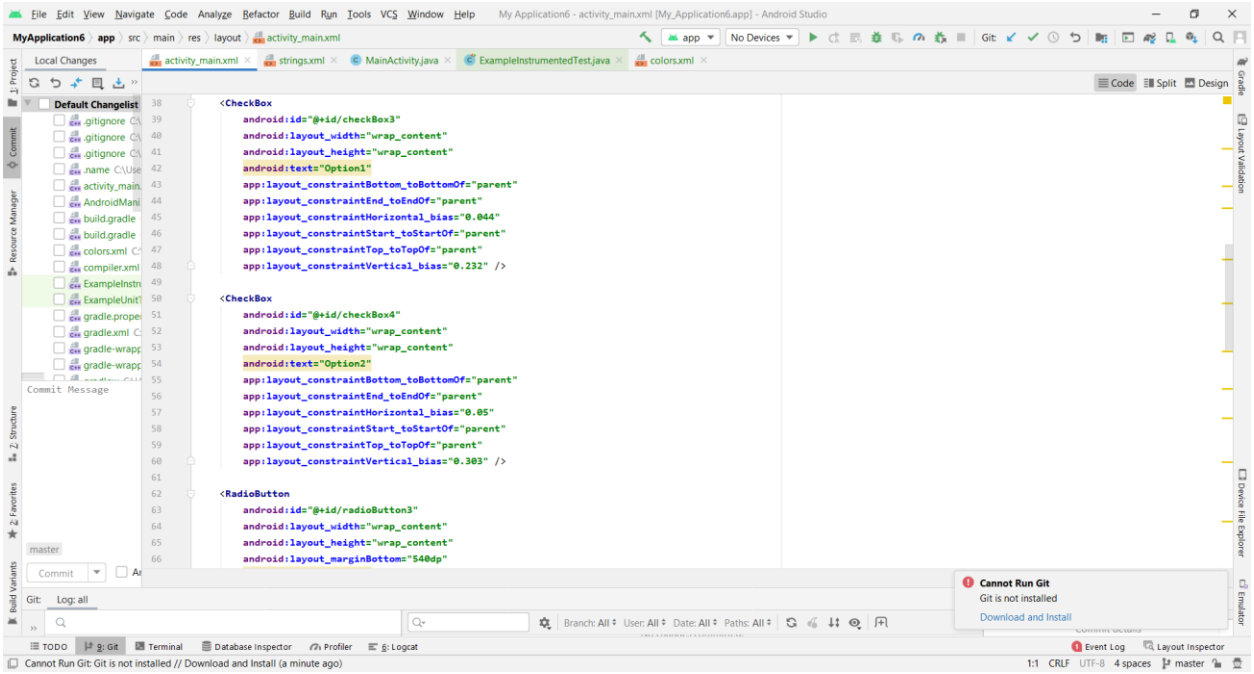


Practical 4:- Create the form using all the UI i.e Check Button, Radio Button, TextView

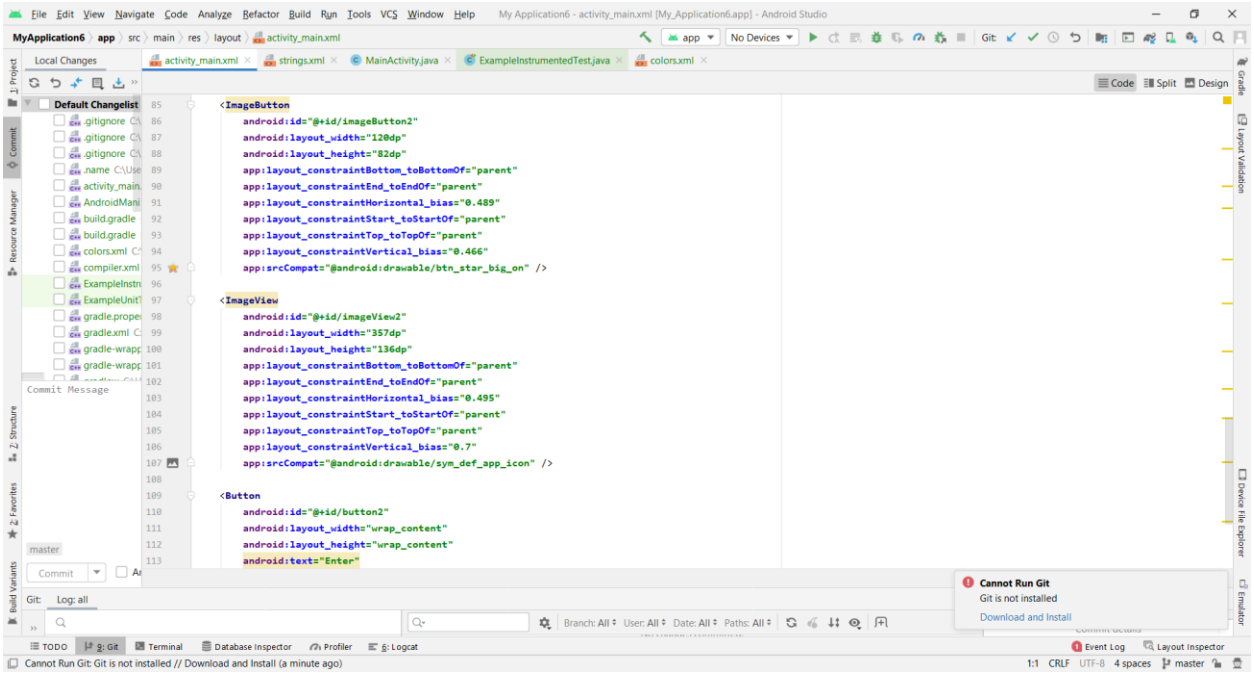
Xml File



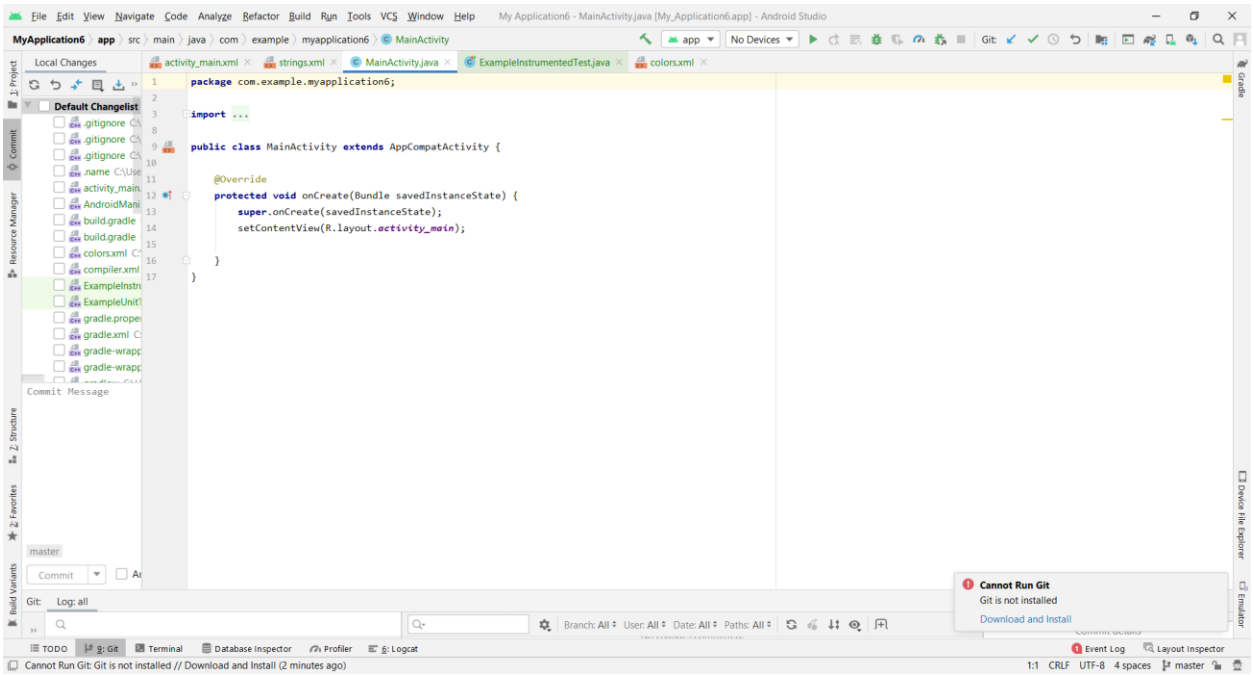
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="This is my app"
        android:textStyle="bold"
        android:textColor="#90EE90"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.05"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.049" />

    <EditText
        android:id="@+id/editTextTextPersonName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        android:text="Jaspreet(1706861)"
        android:textStyle="bold"
```



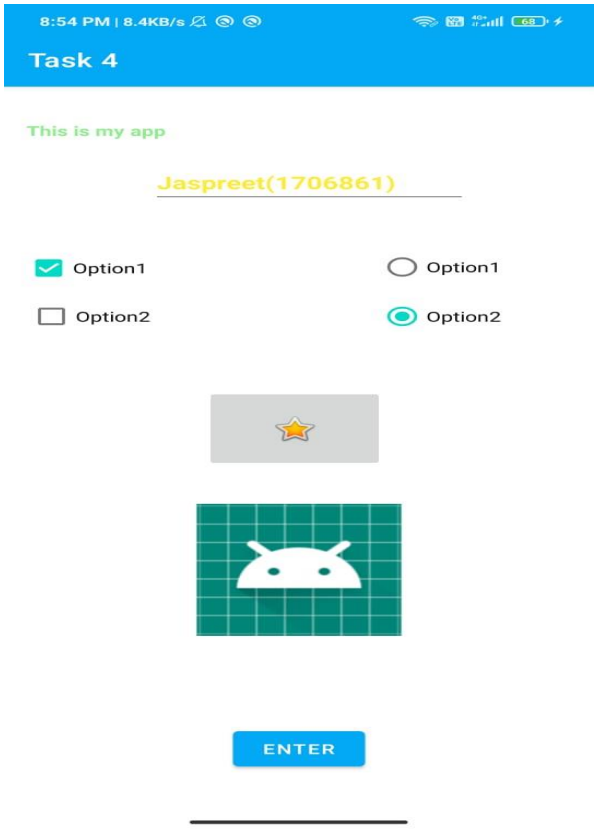
```
    <CheckBox
        android:id="@+id/checkBox3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Option1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.044"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.232" />

    <CheckBox
        android:id="@+id/checkBox4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Option2"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.05"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.303" />

    <RadioButton
        android:id="@+id/radioButton3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="540dp"
```


My Application6 - activity_main.xml [My_Application6.app] - Android Studio
activity_main.xml
strings.xml
MainActivity.java
ExampleInstrumentedTest.java
colors.xml
<ImageButton
android:id="@+id/imageButton2"
android:layout_width="120dp"
android:layout_height="82dp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.489"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.466"
app:srcCompat="@android:drawable/btn_star_big_on" />
<ImageView
android:id="@+id/imageView2"
android:layout_width="357dp"
android:layout_height="136dp"
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="0.7"
app:srcCompat="@android:drawable/sym_def_app_icon" />
<Button
android:id="@+id/button2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Enter"
Cannot Run Git
Git is not installed
Download and Install
Cannot Run Git: Git is not installed // Download and Install (a minute ago)

Java File:-

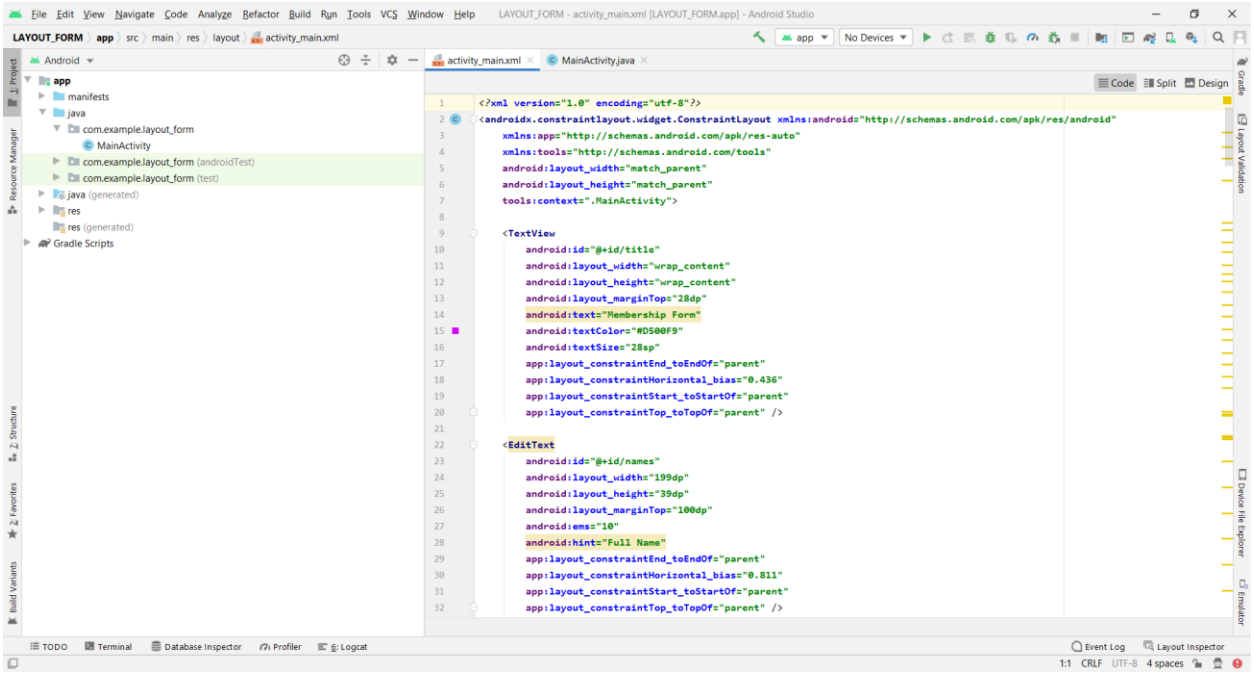

My Application6 - MainActivity.java [My_Application6.app] - Android Studio
activity_main.xml
strings.xml
MainActivity.java
ExampleInstrumentedTest.java
colors.xml
package com.example.myapplication6;
import ...
public class MainActivity extends AppCompatActivity {
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
}
}
Cannot Run Git
Git is not installed
Download and Install
Cannot Run Git: Git is not installed // Download and Install (2 minutes ago)

OUTPUT:-

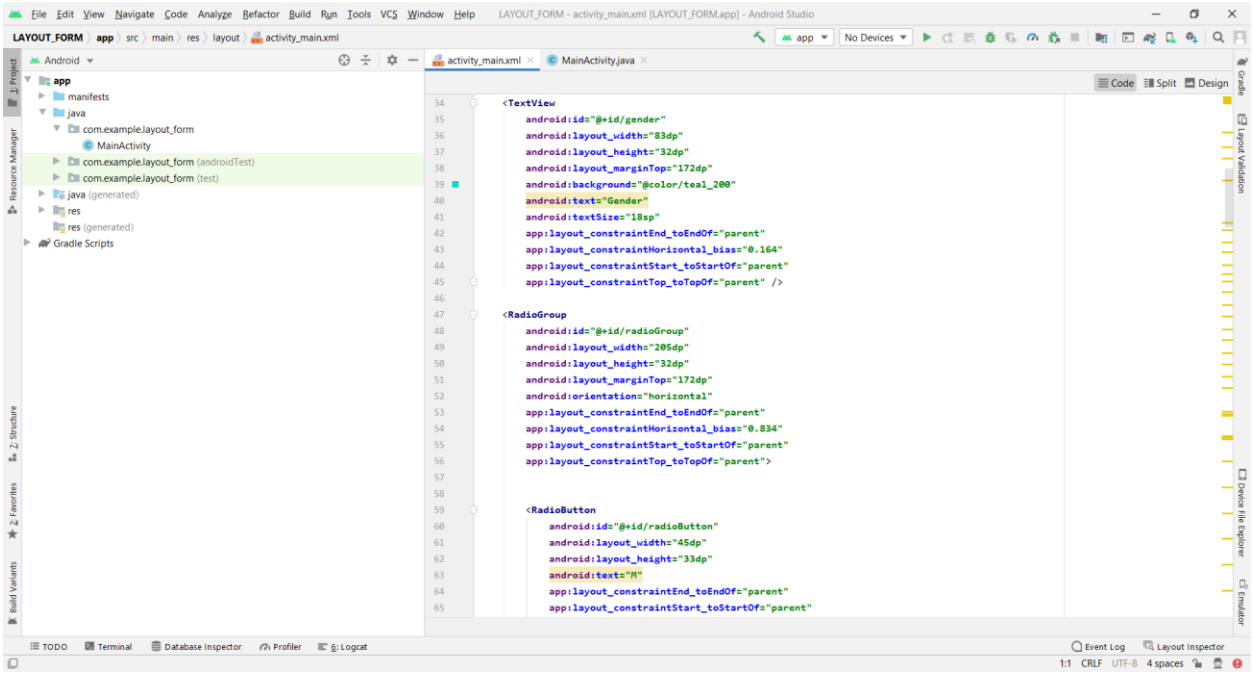

8:54 PM | 8.4KB/s
Task 4
This is my app
Jaspreet(1706861)
Option1
Option2
Option1
Option2
ENTER

Practical 5:- By using all Layouts design the form

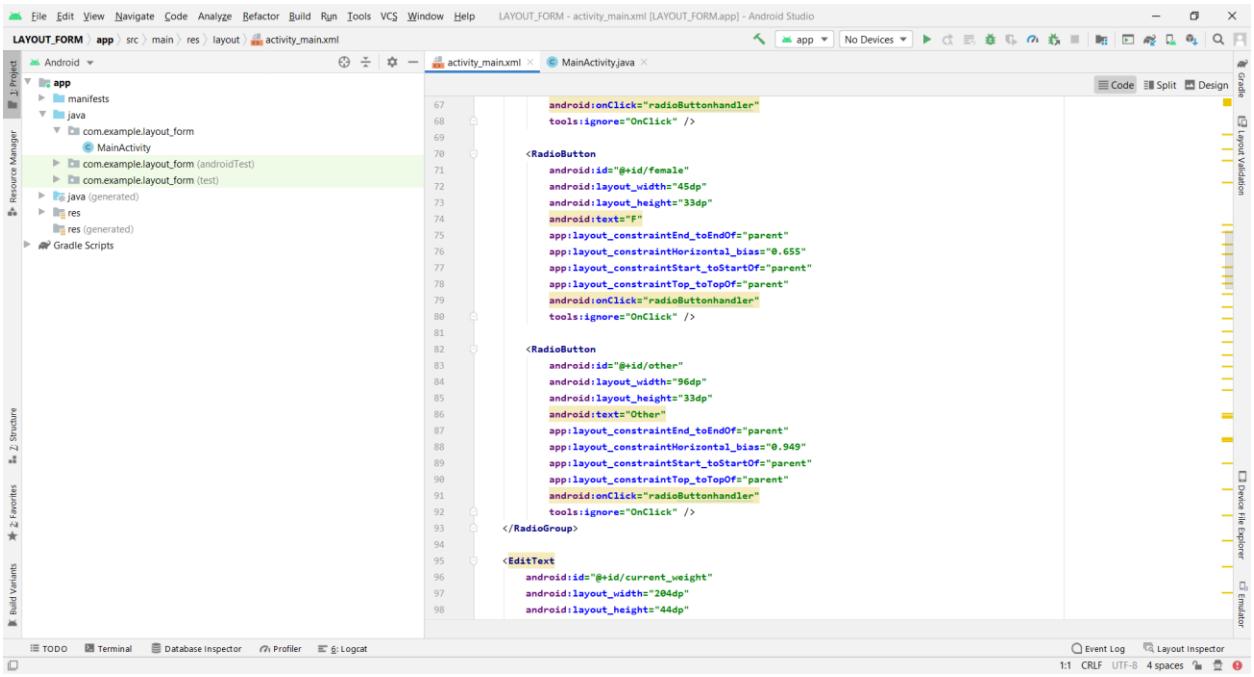
Xml File:-

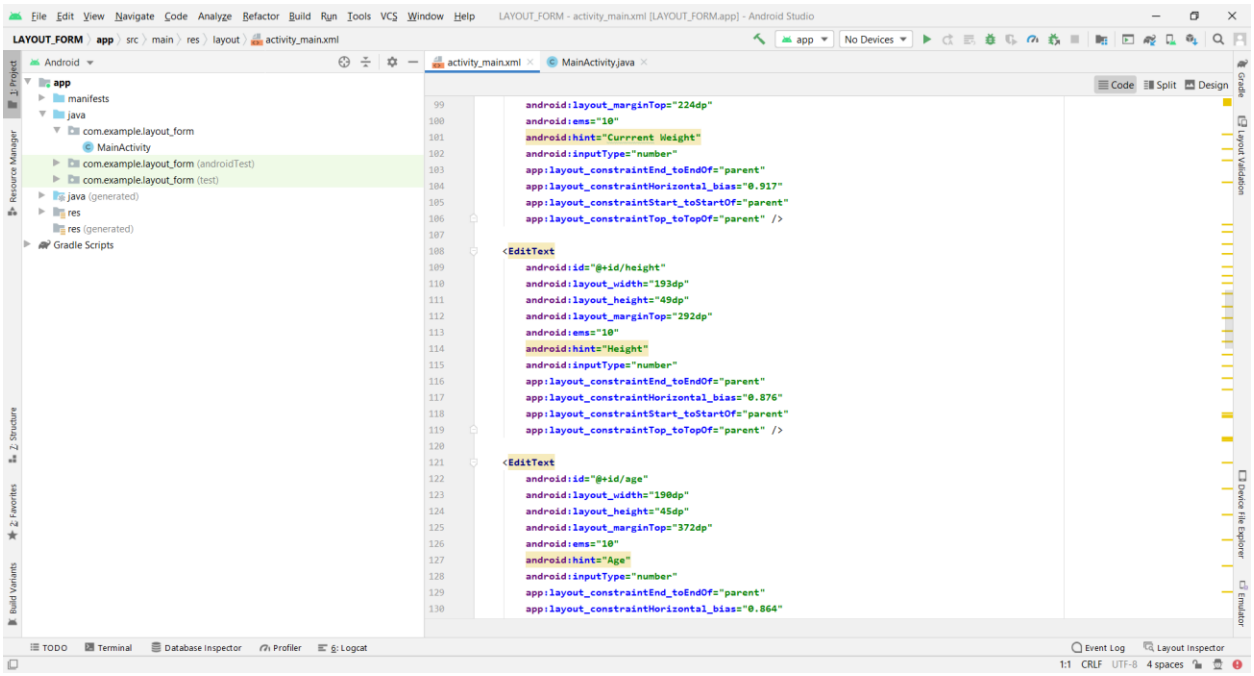


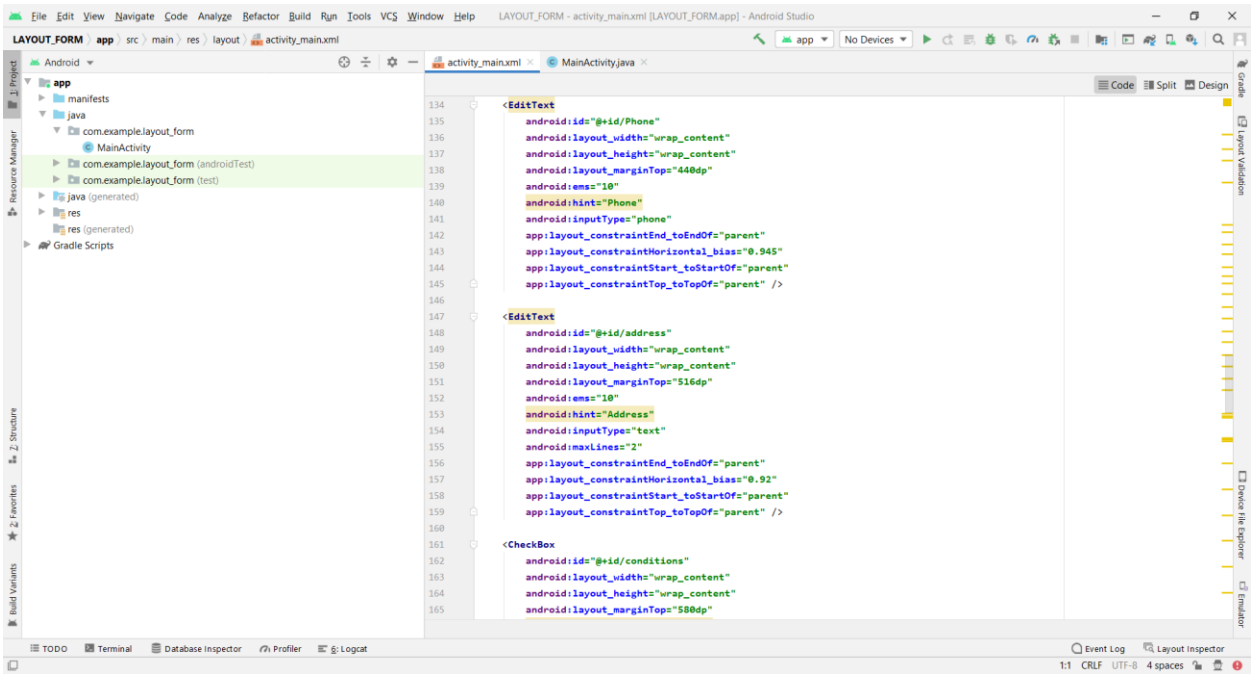
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/title"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="28dp"
        android:text="Membership Form"
        android:textColor="#D500F9"
        android:textSize="28sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.436"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/names"
        android:layout_width="199dp"
        android:layout_height="39dp"
        android:layout_marginTop="100dp"
        android:ems="10"
        android:hint="Full Name"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.811"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
```

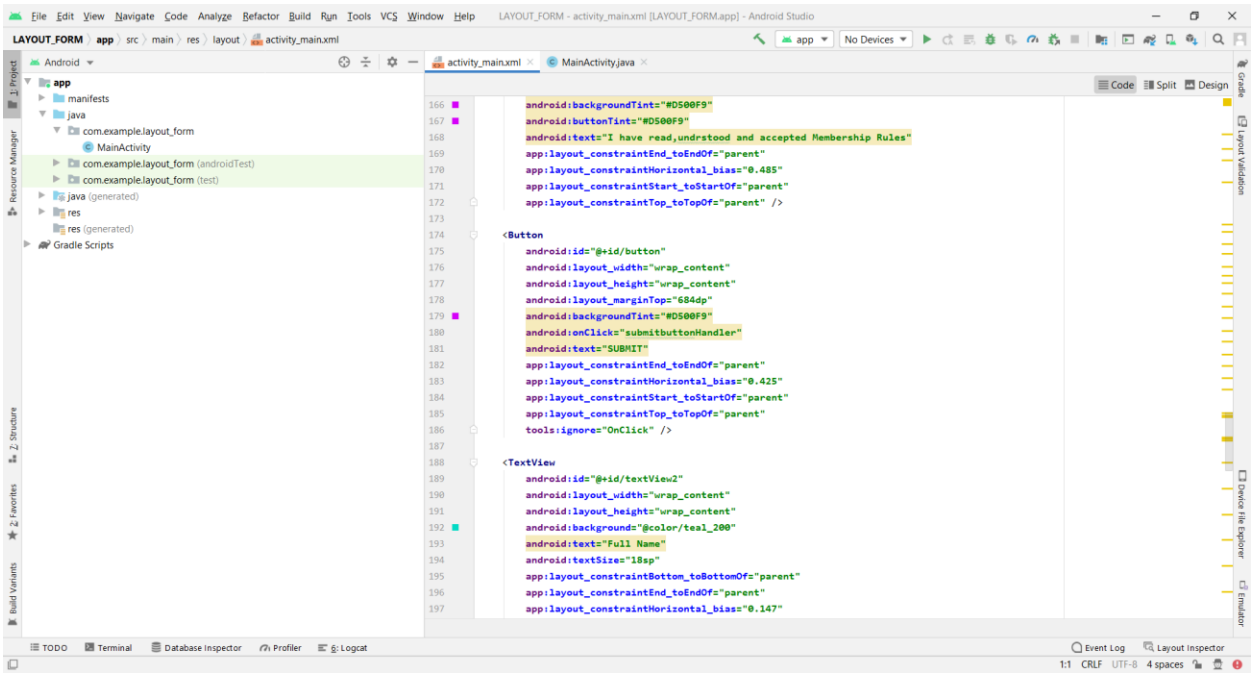


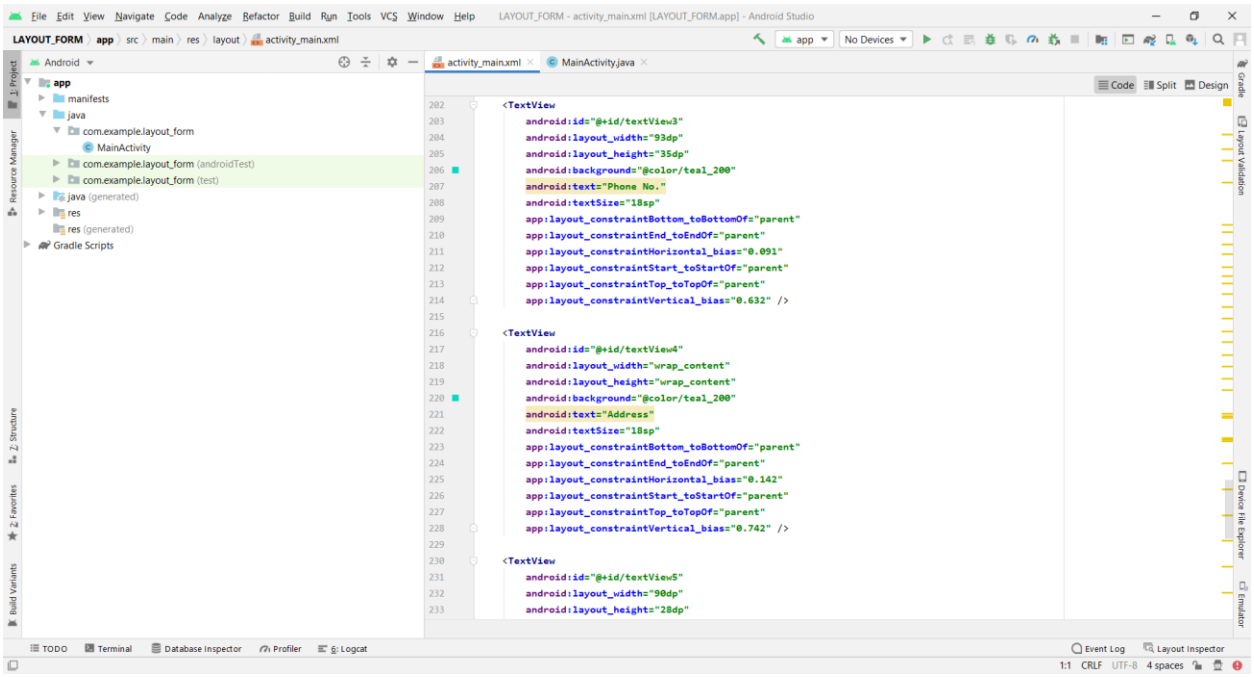
```
    <TextView
        android:id="@+id/gender"
        android:layout_width="83dp"
        android:layout_height="32dp"
        android:layout_marginTop="172dp"
        android:background="@color/teal_200"
        android:text="Gender"
        android:textSize="18sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.164"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <RadioGroup
        android:id="@+id/radioGroup"
        android:layout_width="205dp"
        android:layout_height="32dp"
        android:layout_marginTop="172dp"
        android:orientation="horizontal"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.834"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent">


        <RadioButton
            android:id="@+id/radioButton"
            android:layout_width="45dp"
            android:layout_height="33dp"
            android:text="M"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
```


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
LAYOUT_FORM - activity_main.xml [LAYOUT_FORM.app] - Android Studio
LAYOUT_FORM app src main res layout activity_main.xml
app
No Devices
Android
activity_main.xml
MainActivity.java
Code Split Design
app
manifests
java
com.example.layout_form
MainActivity
com.example.layout_form (androidTest)
com.example.layout_form (test)
java (generated)
res
res (generated)
Gradle Scripts
android:onClick="radioButtonhandler"
tools:ignore="OnClick" />
<RadioButton
android:id="@+id/female"
android:layout_width="45dp"
android:layout_height="33dp"
android:text="F"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.655"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:onClick="radioButtonhandler"
tools:ignore="OnClick" />
<RadioButton
android:id="@+id/other"
android:layout_width="96dp"
android:layout_height="33dp"
android:text="Other"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.949"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:onClick="radioButtonhandler"
tools:ignore="OnClick" />
</RadioGroup>
<EditText
android:id="@+id/current_weight"
android:layout_width="204dp"
android:layout_height="44dp"
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
LAYOUT_FORM - activity_main.xml [LAYOUT_FORM.app] - Android Studio
LAYOUT_FORM app src main res layout activity_main.xml
app
No Devices
Android
activity_main.xml
MainActivity.java
Code Split Design
app
manifests
java
com.example.layout_form
MainActivity
com.example.layout_form (androidTest)
com.example.layout_form (test)
java (generated)
res
res (generated)
Gradle Scripts
android:layout_marginTop="224dp"
android:ems="10"
android:hint="Currrent Weight"
android:inputType="number"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.917"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<EditText
android:id="@+id/height"
android:layout_width="193dp"
android:layout_height="49dp"
android:layout_marginTop="292dp"
android:ems="10"
android:hint="Height"
android:inputType="number"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.876"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<EditText
android:id="@+id/age"
android:layout_width="190dp"
android:layout_height="45dp"
android:layout_marginTop="372dp"
android:ems="10"
android:hint="Age"
android:inputType="number"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.864"
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
LAYOUT_FORM - activity_main.xml [LAYOUT_FORM.app] - Android Studio
LAYOUT_FORM › app › src › main › res › layout › activity_main.xml
app
No Devices
Android
activity_main.xml
MainActivity.java
Code
Split
Design
app
manifests
java
com.example.layout_form
MainActivity
com.example.layout_form (androidTest)
com.example.layout_form (test)
java (generated)
res
res (generated)
Gradle Scripts
<EditText
android:id="@+id/Phone"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="440dp"
android:ems="10"
android:hint="Phone"
android:inputType="phone"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.945"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<EditText
android:id="@+id/address"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="516dp"
android:ems="10"
android:hint="Address"
android:inputType="text"
android:maxLines="2"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.92"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<CheckBox
android:id="@+id/conditions"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="580dp"
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1
CRLF
UTF-8
4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
LAYOUT_FORM - activity_main.xml [LAYOUT_FORM.app] - Android Studio
LAYOUT_FORM › app › src › main › res › layout › activity_main.xml
app
No Devices
Android
activity_main.xml
MainActivity.java
Code
Split
Design
app
manifests
java
com.example.layout_form
MainActivity
com.example.layout_form (androidTest)
com.example.layout_form (test)
java (generated)
res
res (generated)
Gradle Scripts
android:backgroundTint="#D500F9"
android:buttonTint="#D500F9"
android:text="I have read,undrstood and accepted Membership Rules"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.485"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<Button
android:id="@+id/button"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="684dp"
android:backgroundTint="#D500F9"
android:onClick="submitbuttonHandler"
android:text="SUBMIT"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.425"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
tools:ignore="OnClick" />
<TextView
android:id="@+id/textView2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:background="@color/teal_200"
android:text="Full Name"
android:textSize="18sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.147"
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1
CRLF
UTF-8
4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
LAYOUT_FORM - activity_main.xml [LAYOUT_FORM.app] - Android Studio
LAYOUT_FORM › app › src › main › res › layout › activity_main.xml
app
No Devices
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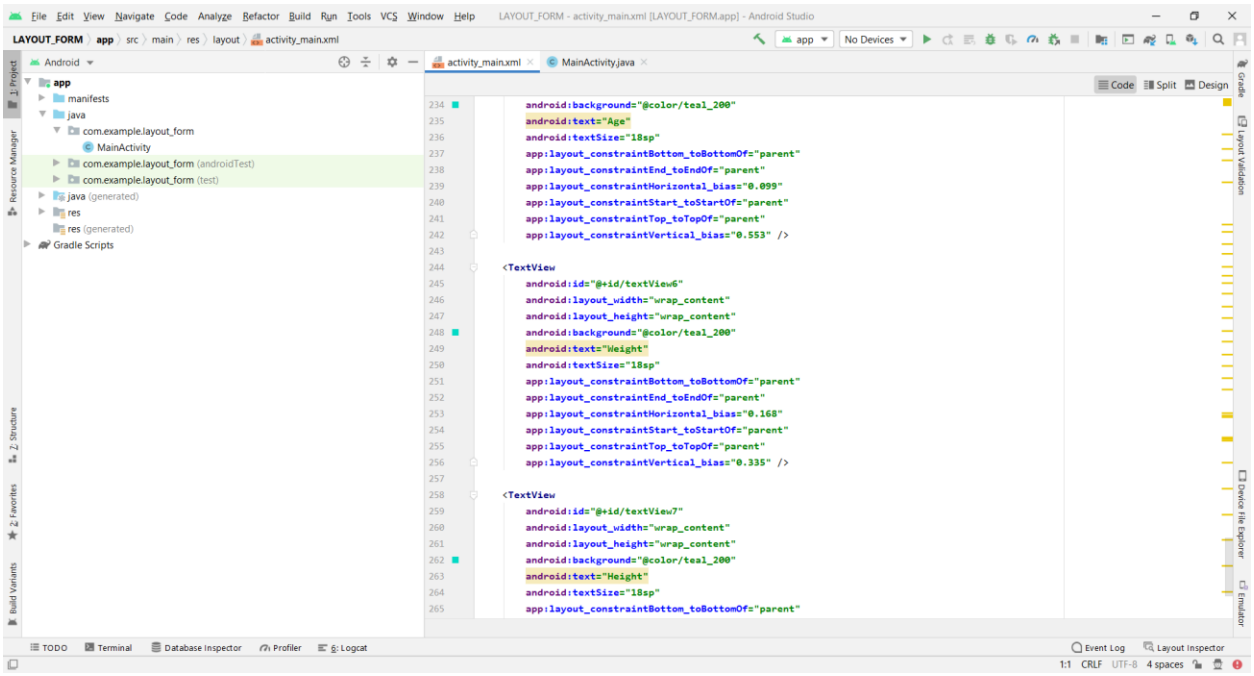
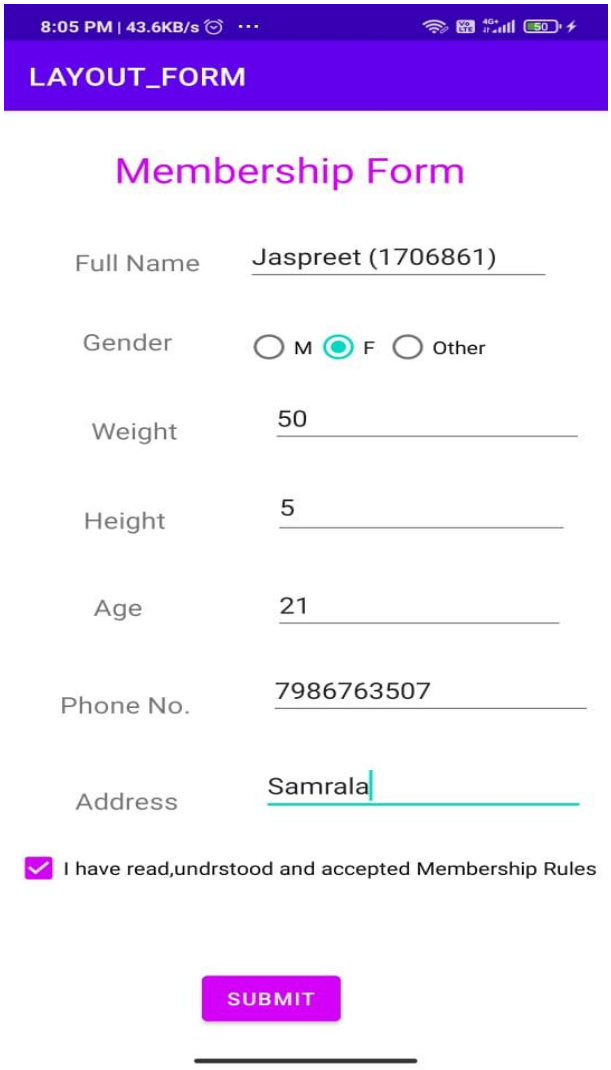
activity_main.xml
MainActivity.java
Code
Split
Design
app
manifests
java
com.example.layout_form
MainActivity
com.example.layout_form (androidTest)
com.example.layout_form (test)
java (generated)
res
res (generated)
Gradle Scripts
<TextView
android:id="@+id/textView3"
android:layout_width="93dp"
android:layout_height="35dp"
android:background="@color/teal_200"
android:text="Phone No."
android:textSize="18sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.091"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.632" />
<TextView
android:id="@+id/textView4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:background="@color/teal_200"
android:text="Address"
android:textSize="18sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.142"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.742" />
<TextView
android:id="@+id/textView5"
android:layout_width="90dp"
android:layout_height="28dp"
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1
CRLF
UTF-8
4 spaces

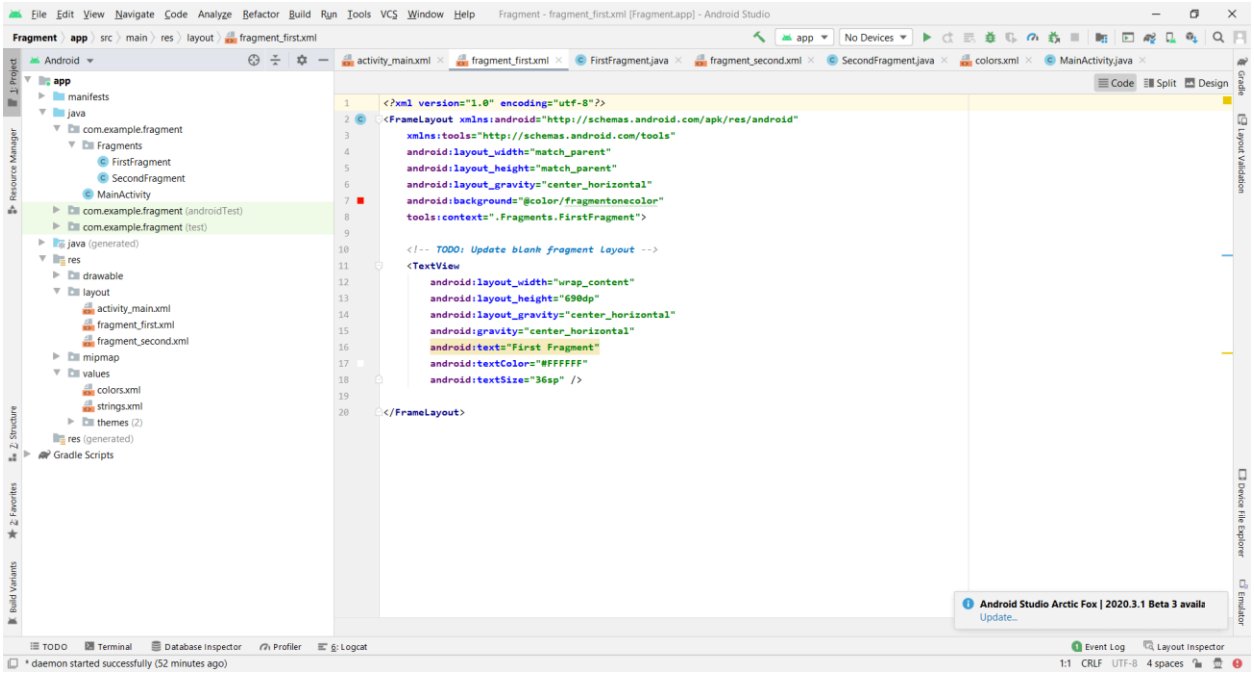

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
LAYOUT_FORM - activity_main.xml [LAYOUT_FORM.app] - Android Studio
LAYOUT_FORM › app › src › main › res › layout › activity_main.xml
app
No Devices
Android
activity_main.xml
MainActivity.java
Code
Split
Design
app
manifests
java
com.example.layout_form
MainActivity
com.example.layout_form (androidTest)
com.example.layout_form (test)
java (generated)
res
res (generated)
Gradle Scripts
android:background="@color/teal_200"
android:text="Age"
android:textSize="18sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.099"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.553" />
<TextView
android:id="@+id/textView6"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:background="@color/teal_200"
android:text="Weight"
android:textSize="18sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.168"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.335" />
<TextView
android:id="@+id/textView7"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:background="@color/teal_200"
android:text="Height"
android:textSize="18sp"
app:layout_constraintBottom_toBottomOf="parent"
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1
CRLF
UTF-8
4 spaces

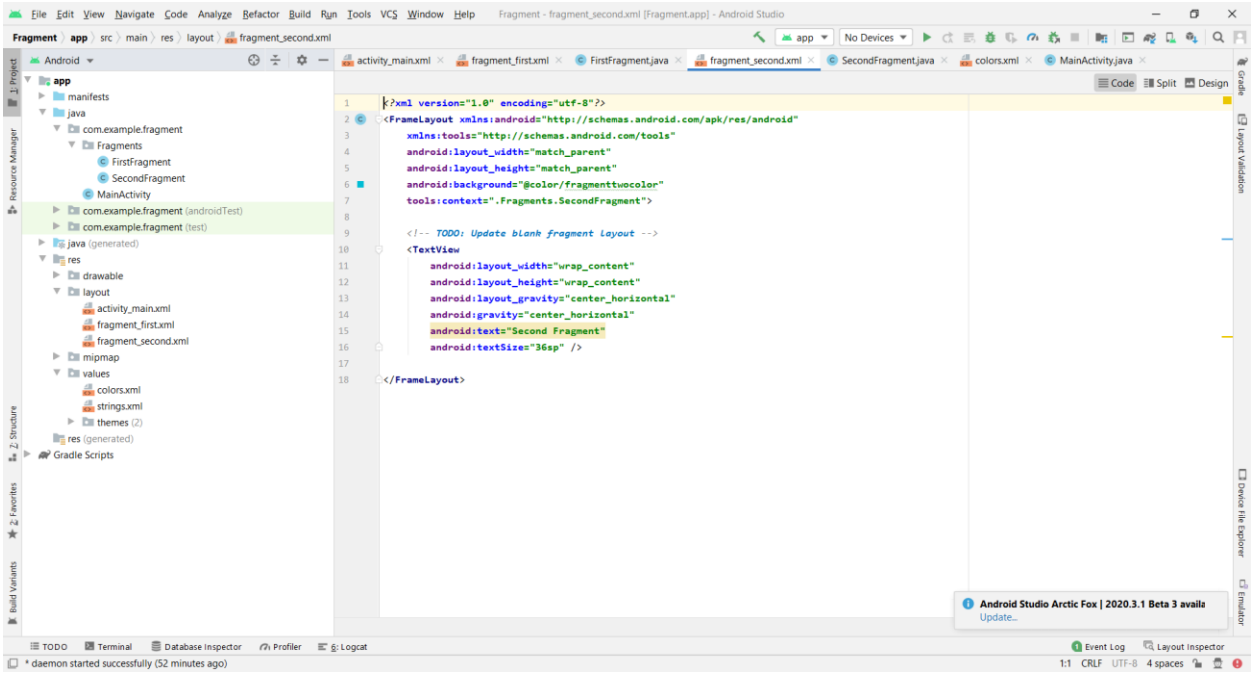
OUTPUT:-

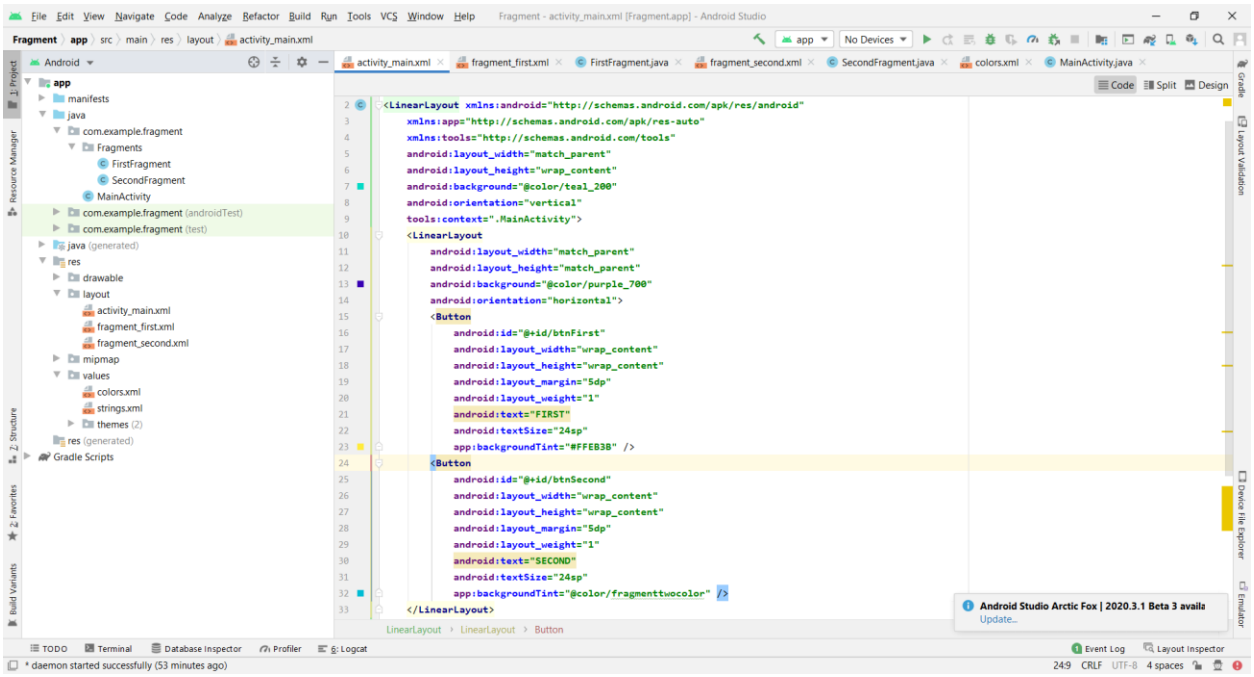

8:05 PM | 43.6KB/s
LAYOUT_FORM
Membership Form
Full Name
Jaspreet (1706861)
Gender
M
F
Other
Weight
50
Height
5
Age
21
Phone No.
7986763507
Address
Samrala
I have read,undrstood and accepted Membership Rules
SUBMIT

Practical 6:- Create a Fragment

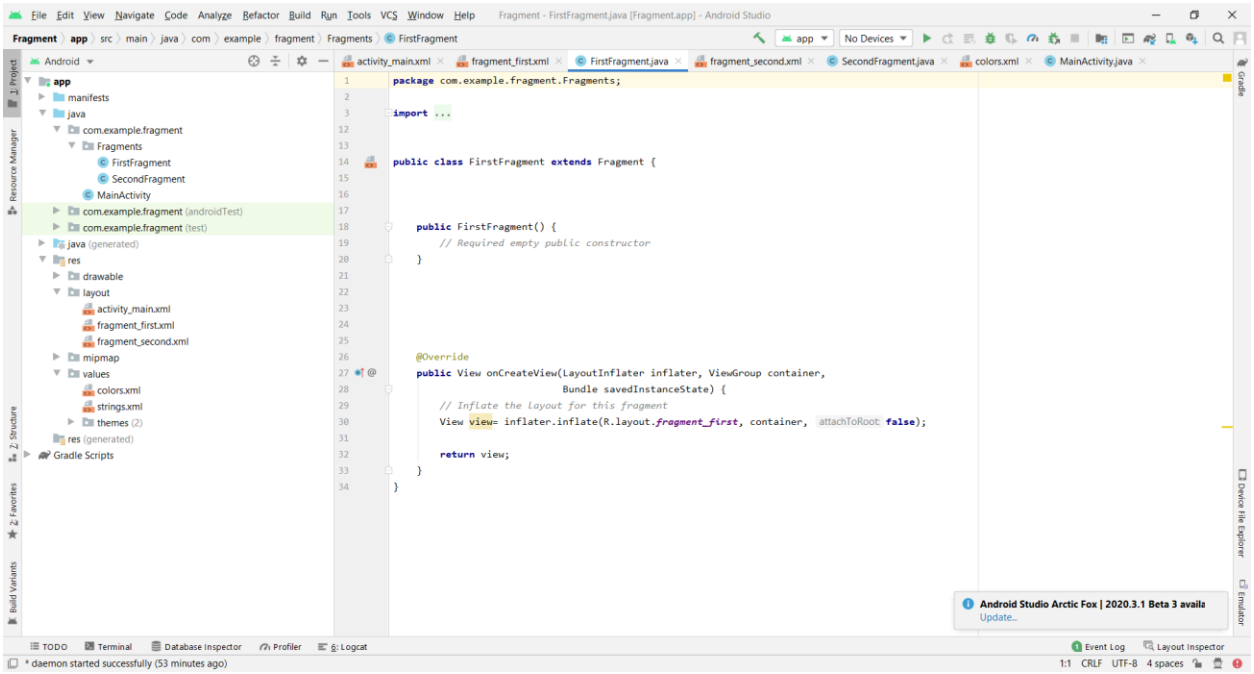
Xml File:-

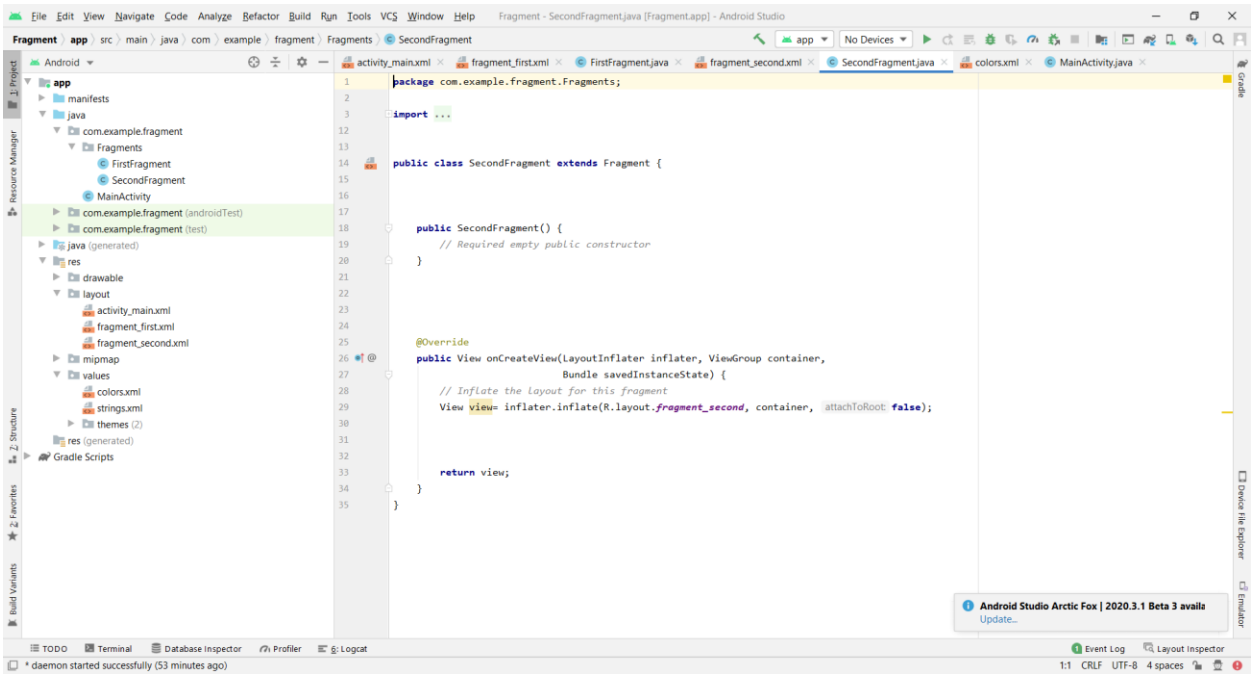


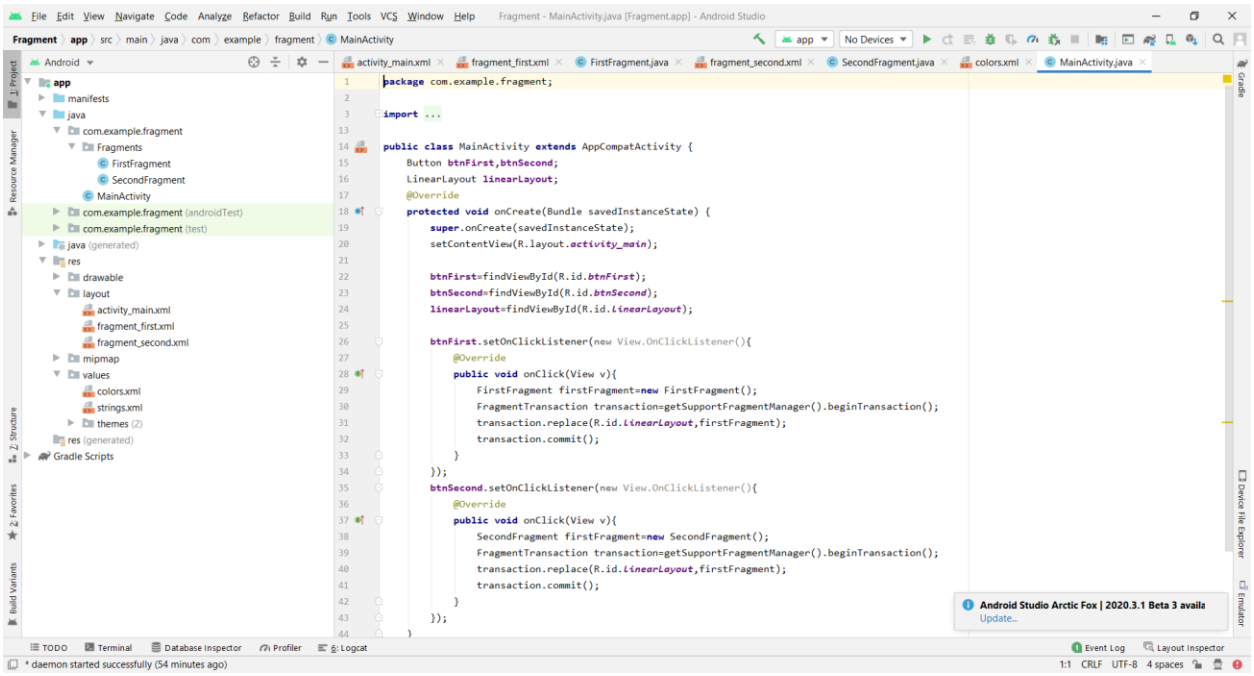



File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Fragment - activity_main.xml [Fragment.app] - Android Studio
Fragment app src main res layout activity_main.xml
app No Devices
Android
activity_main.xml fragment_first.xml FirstFragment.java fragment_second.xml SecondFragment.java colors.xml MainActivity.java
Code Split Design
app
manifests
java
com.example.fragment
Fragments
FirstFragment
SecondFragment
MainActivity
com.example.fragment (androidTest)
com.example.fragment (test)
java (generated)
res
drawable
layout
activity_main.xml
fragment_first.xml
fragment_second.xml
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
<LinearLayout 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="wrap_content"
android:background="@color/teal_200"
android:orientation="vertical"
tools:context=".MainActivity">
<LinearLayout
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="@color/purple_700"
android:orientation="horizontal">
<Button
android:id="@+id/btnFirst"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_margin="5dp"
android:layout_weight="1"
android:text="FIRST"
android:textSize="24sp"
app:backgroundTint="#FFEB3B" />
<Button
android:id="@+id/btnSecond"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_margin="5dp"
android:layout_weight="1"
android:text="SECOND"
android:textSize="24sp"
app:backgroundTint="@color/fragmenttwocolor" />
</LinearLayout>
Android Studio Arctic Fox | 2020.3.1 Beta 3 availa
Update...
LinearLayout › LinearLayout › Button
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
* daemon started successfully (53 minutes ago)
24:9 CRLF UTF-8 4 spaces

Java File:-

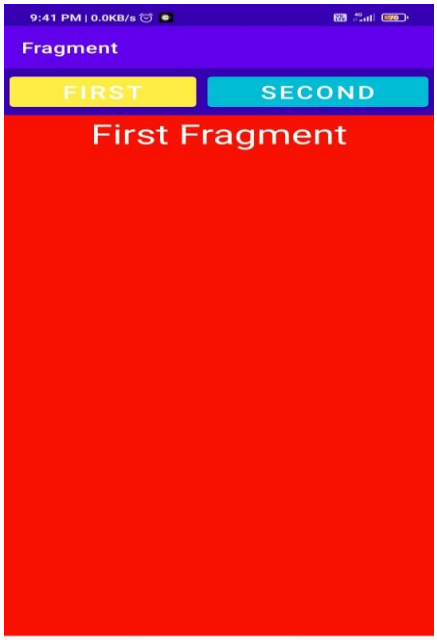

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Fragment - FirstFragment.java [Fragment.app] - Android Studio
Fragment app src main java com example fragment Fragments FirstFragment
app No Devices
Android
activity_main.xml fragment_first.xml FirstFragment.java fragment_second.xml SecondFragment.java colors.xml MainActivity.java
app
manifests
java
com.example.fragment
Fragments
FirstFragment
SecondFragment
MainActivity
com.example.fragment (androidTest)
com.example.fragment (test)
java (generated)
res
drawable
layout
activity_main.xml
fragment_first.xml
fragment_second.xml
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
package com.example.fragment.Fragments;
import ...
public class FirstFragment extends Fragment {
public FirstFragment() {
// Required empty public constructor
}
@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
Bundle savedInstanceState) {
// Inflate the layout for this fragment
View view= inflater.inflate(R.layout.fragment_first, container, attachToRoot: false);
return view;
}
}
Android Studio Arctic Fox | 2020.3.1 Beta 3 availa
Update...
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
* daemon started successfully (53 minutes ago)
1:1 CRLF UTF-8 4 spaces

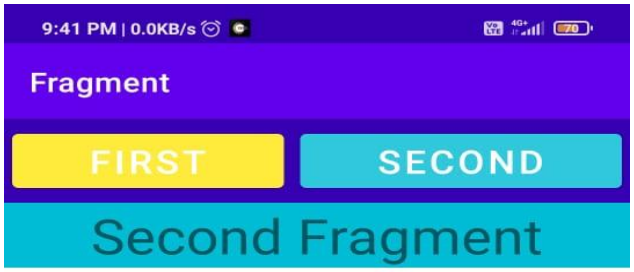

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Fragment - SecondFragment.java [Fragment.app] - Android Studio
Fragment app src main java com example fragment Fragments SecondFragment
app
No Devices
Android
activity_main.xml
fragment_first.xml
FirstFragment.java
fragment_second.xml
SecondFragment.java
colors.xml
MainActivity.java
app
manifests
java
com.example.fragment
Fragments
FirstFragment
SecondFragment
MainActivity
com.example.fragment (androidTest)
com.example.fragment (test)
java (generated)
res
drawable
layout
activity_main.xml
fragment_first.xml
fragment_second.xml
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
package com.example.fragment.Fragments;
import ...
public class SecondFragment extends Fragment {
public SecondFragment() {
// Required empty public constructor
}
@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
Bundle savedInstanceState) {
// Inflate the layout for this fragment
View view= inflater.inflate(R.layout.fragment_second, container, attachToRoot: false);
return view;
}
}
Android Studio Arctic Fox | 2020.3.1 Beta 3 availa
Update...
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
* daemon started successfully (53 minutes ago)
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Fragment - MainActivity.java [Fragment.app] - Android Studio
Fragment app src main java com example fragment MainActivity
app
No Devices
Android
activity_main.xml
fragment_first.xml
FirstFragment.java
fragment_second.xml
SecondFragment.java
colors.xml
MainActivity.java
app
manifests
java
com.example.fragment
Fragments
FirstFragment
SecondFragment
MainActivity
com.example.fragment (androidTest)
com.example.fragment (test)
java (generated)
res
drawable
layout
activity_main.xml
fragment_first.xml
fragment_second.xml
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
package com.example.fragment;
import ...
public class MainActivity extends AppCompatActivity {
Button btnFirst,btnSecond;
LinearLayout linearLayout;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
btnFirst=findViewById(R.id.btnFirst);
btnSecond=findViewById(R.id.btnSecond);
linearLayout=findViewById(R.id.linearLayout);
btnFirst.setOnClickListener(new View.OnClickListener(){
@Override
public void onClick(View v){
FirstFragment firstFragment=new FirstFragment();
FragmentTransaction transaction=getSupportFragmentManager().beginTransaction();
transaction.replace(R.id.linearLayout,firstFragment);
transaction.commit();
}
});
btnSecond.setOnClickListener(new View.OnClickListener(){
@Override
public void onClick(View v){
SecondFragment firstFragment=new SecondFragment();
FragmentTransaction transaction=getSupportFragmentManager().beginTransaction();
transaction.replace(R.id.linearLayout,firstFragment);
transaction.commit();
}
});
}
Android Studio Arctic Fox | 2020.3.1 Beta 3 availa
Update...
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
* daemon started successfully (54 minutes ago)
1:1 CRLF UTF-8 4 spaces

OUTPUT:-

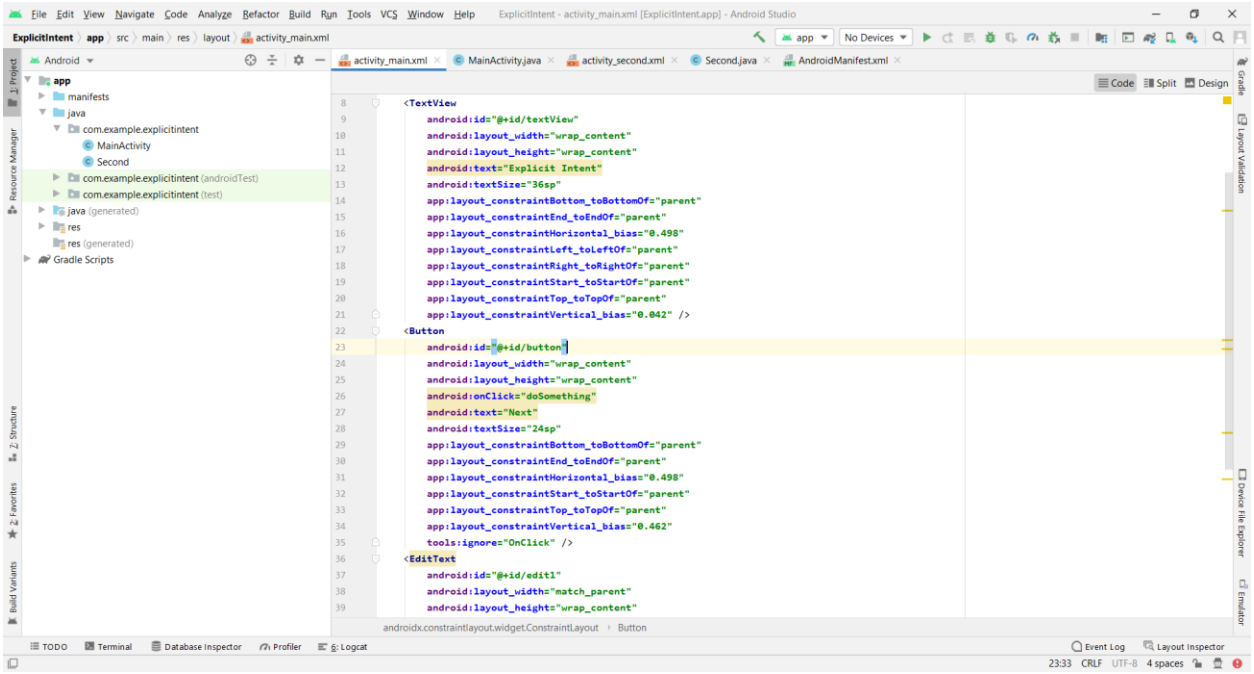

9:41 PM | 0.0KB/s
Fragment
FIRST
SECOND


9:41 PM | 0.0KB/s
Fragment
FIRST
SECOND
First Fragment

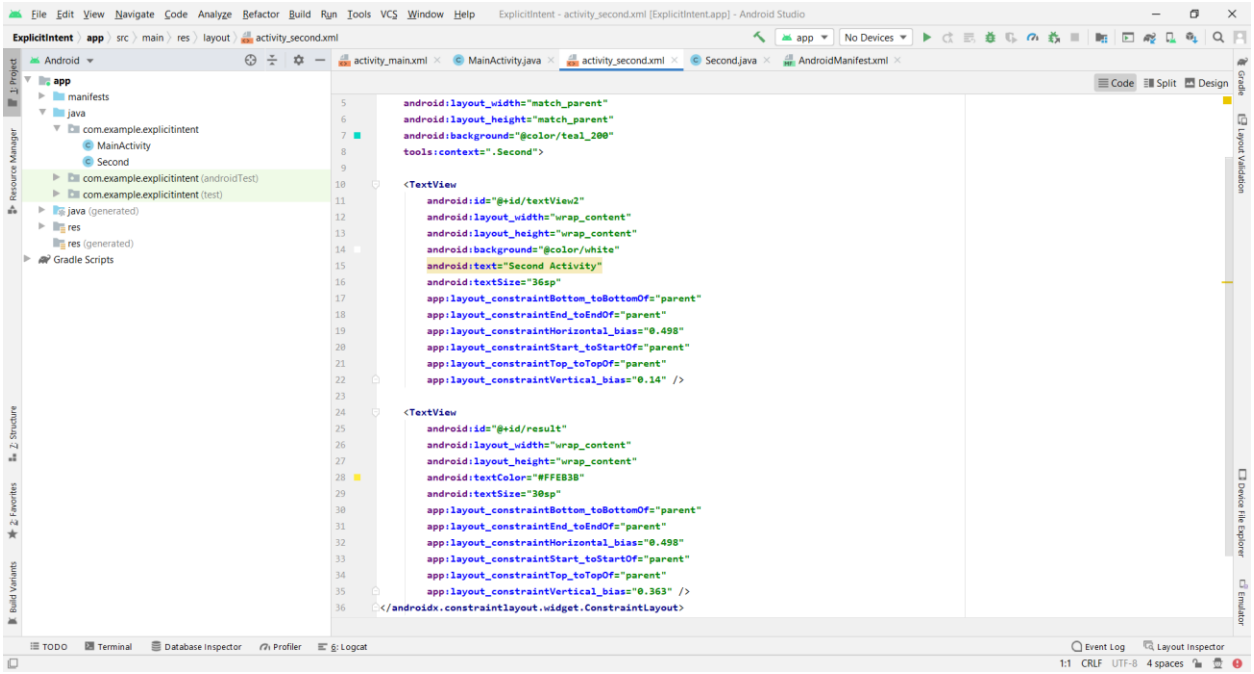

9:41 PM | 0.0KB/s
Fragment
FIRST
SECOND
Second Fragment

Practical 7:- Create an activity that links two activities.

Xml File:-

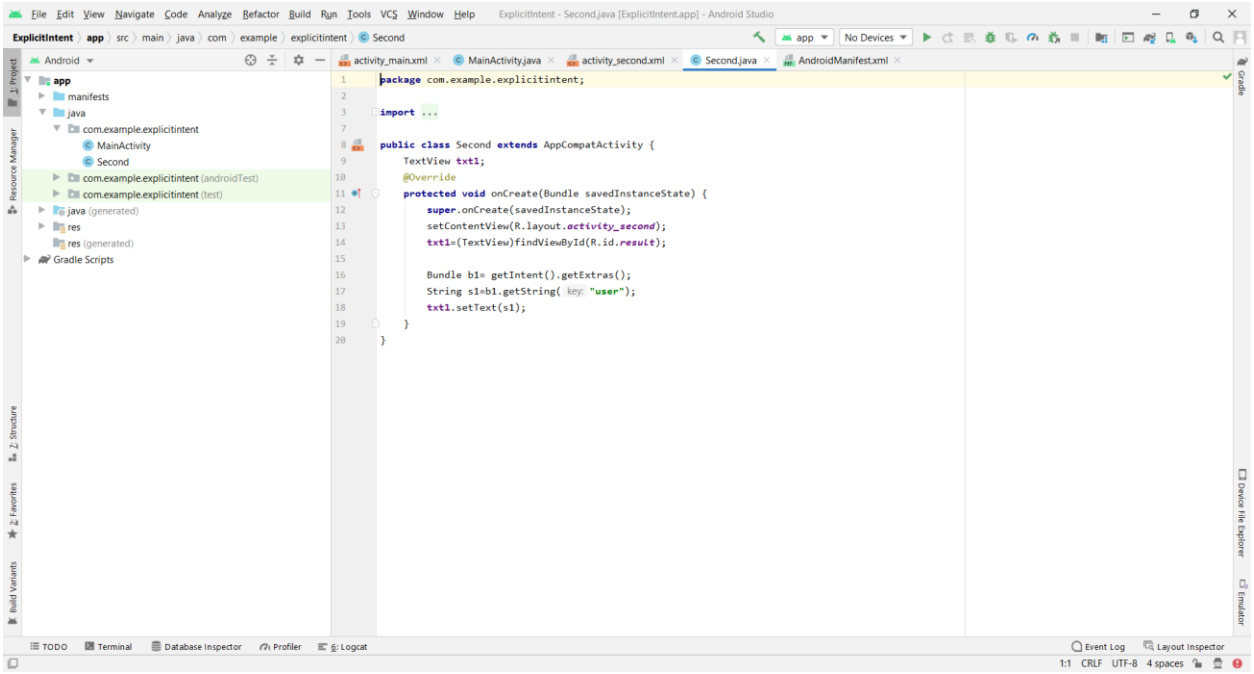


```
<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Explicit Intent"
    android:textSize="36sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.042" />
<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:onClick="doSomething"
    android:text="Next"
    android:textSize="24sp"
    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="0.462"
    tools:ignore="OnClick" />
<EditText
    android:id="@+id/edit1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
```

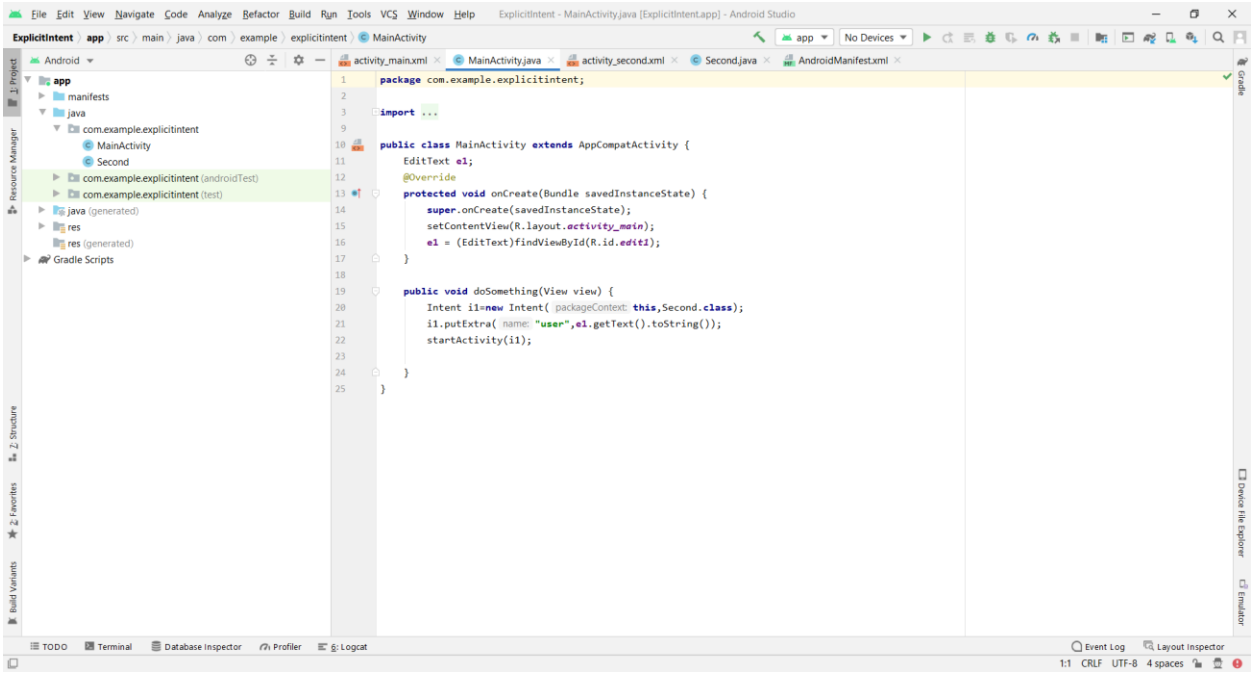


```
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/teal_200"
    tools:context=".Second">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:background="@color/white"
        android:text="Second Activity"
        android:textSize="36sp"
        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="0.14" />

    <TextView
        android:id="@+id/result"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textColor="#FFEB3B"
        android:textSize="30sp"
        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="0.363" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Java File:-



```
package com.example.explicitintent;

import ...

public class Second extends AppCompatActivity {
    TextView txt1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);
        txt1=(TextView)findViewById(R.id.result);

        Bundle b1= getIntent().getExtras();
        String s1=b1.getString( key: "user");
        txt1.setText(s1);
    }
}
```



```
package com.example.explicitintent;

import ...

public class MainActivity extends AppCompatActivity {
    EditText e1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        e1 = (EditText)findViewById(R.id.edit1);
    }

    public void doSomething(View view) {
        Intent i1=new Intent( packageContext: this,Second.class);
        i1.putExtra( name: "user",e1.getText().toString());
        startActivity(i1);

    }
}
```

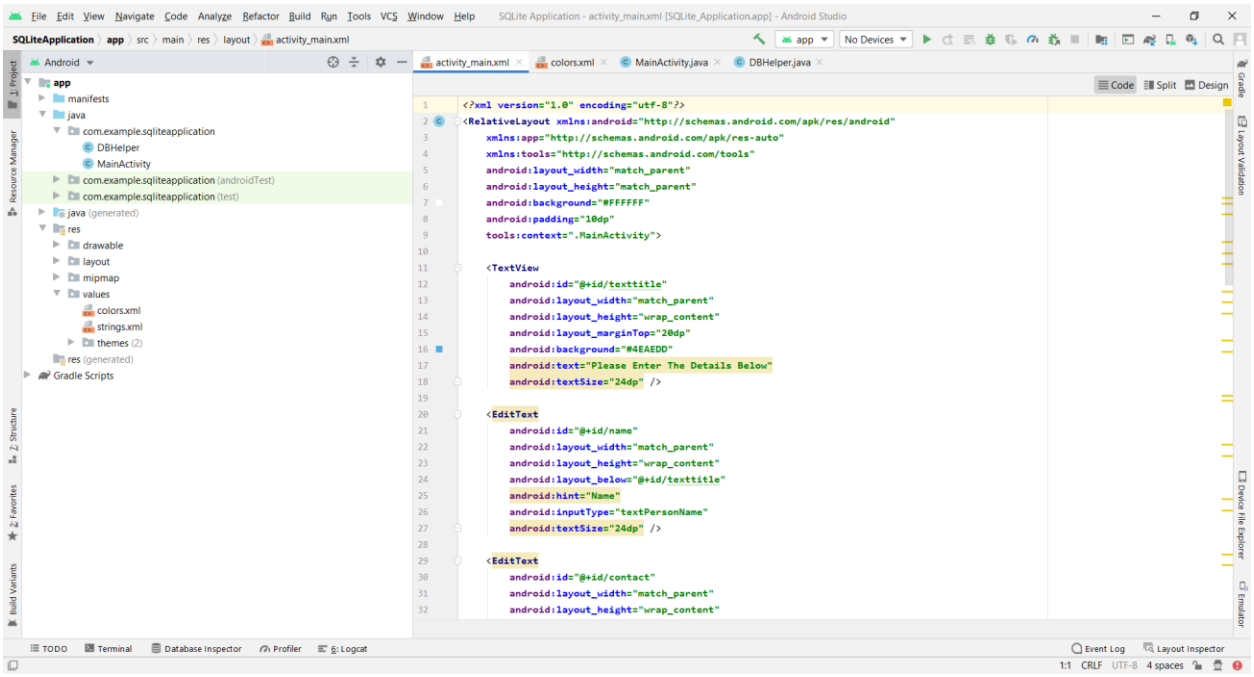
OUTPUT:-


8:26 PM | 0.1KB/s
ExplicitIntent
Explicit Intent
Jaspreet Kaur(1706861)
NEXT

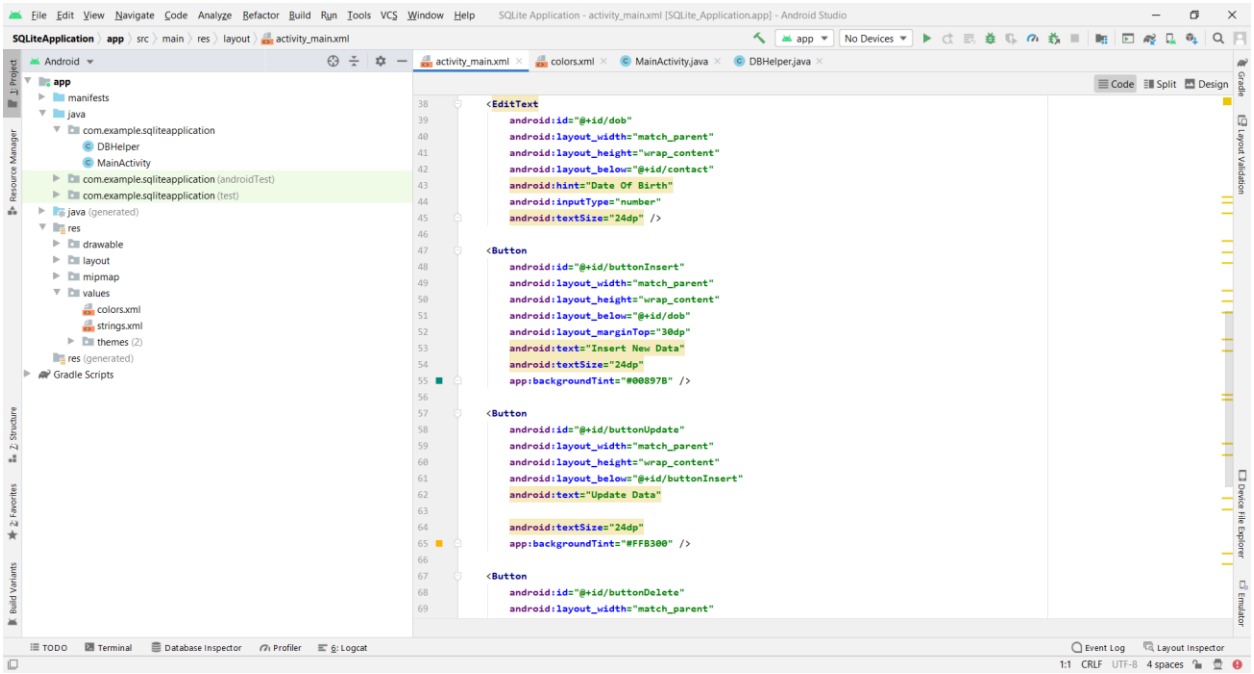

8:26 PM | 0.2KB/s
ExplicitIntent
Second Activity
Jaspreet Kaur(1706861)

Practical 8 :- SQL APPLICATION

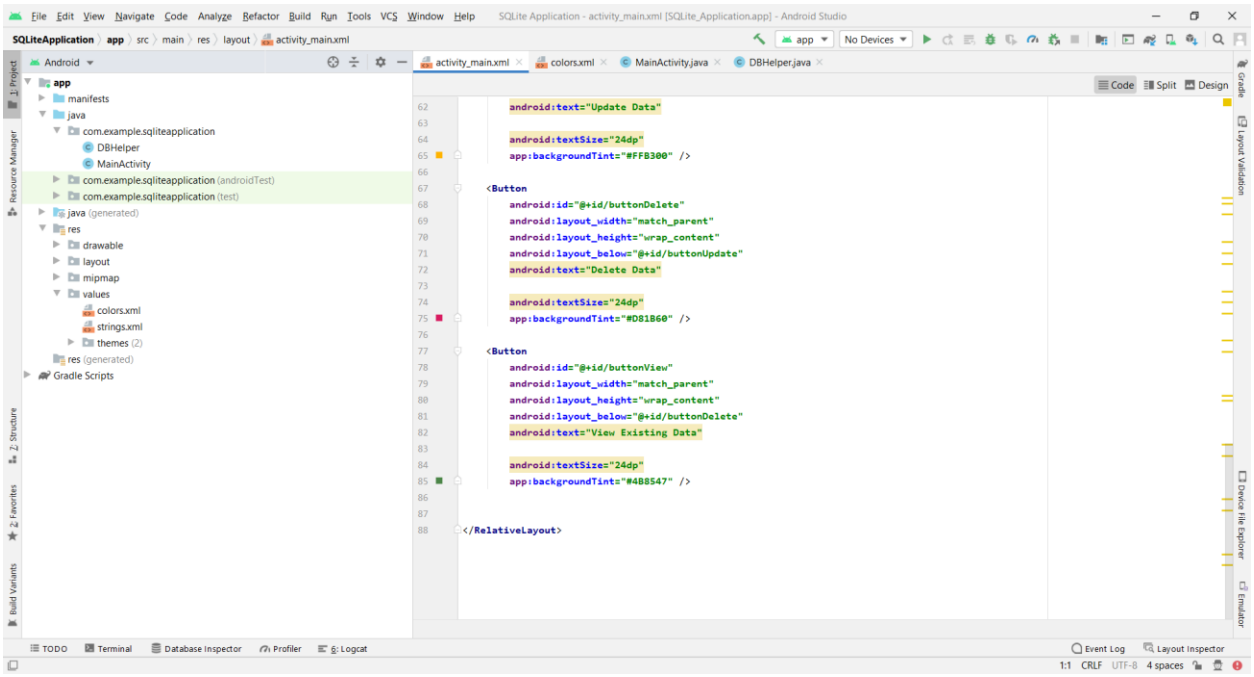
Xml File



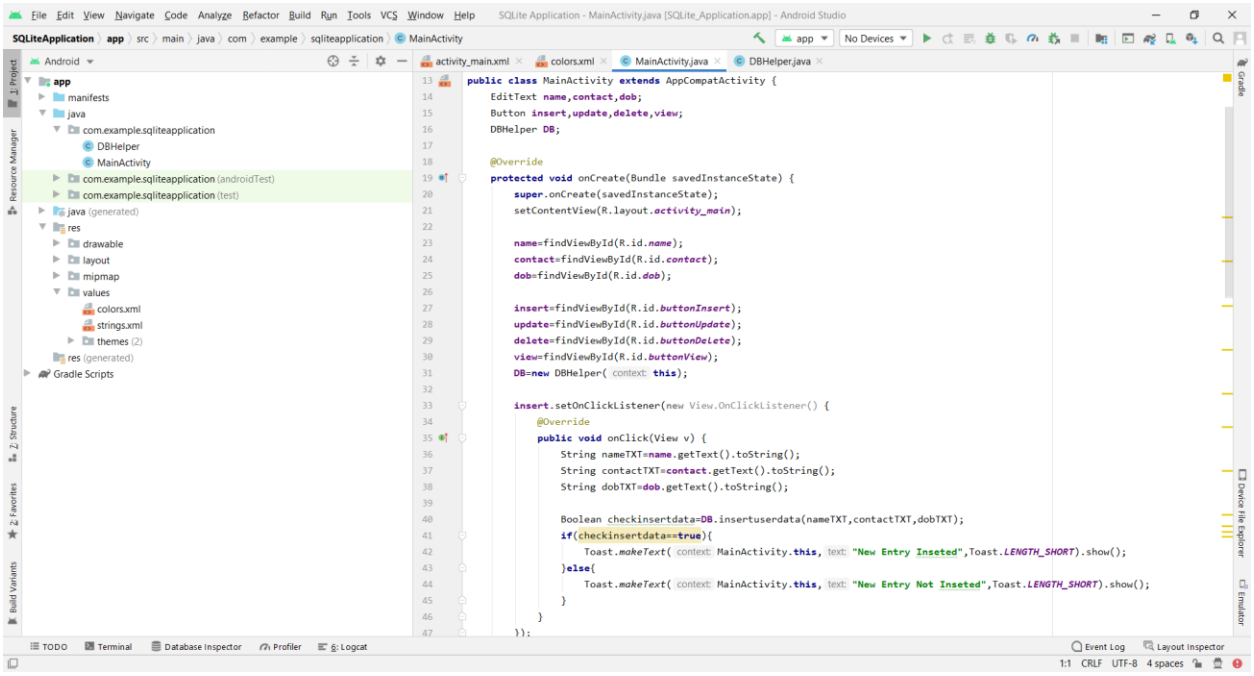
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#FFFFFF"
    android:padding="10dp"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/texttitle"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:background="#4EAEDD"
        android:text="Please Enter The Details Below"
        android:textSize="24dp" />

    <EditText
        android:id="@+id/name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/texttitle"
        android:hint="Name"
        android:inputType="textPersonName"
        android:textSize="24dp" />

    <EditText
        android:id="@+id/contact"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

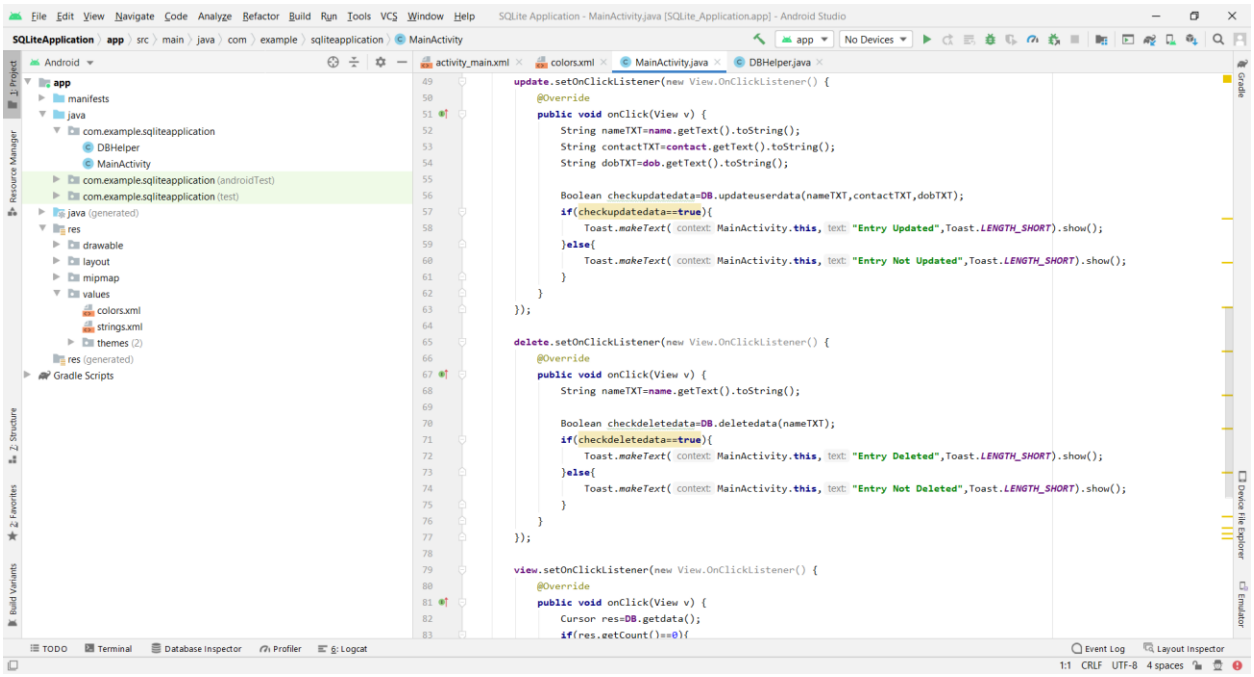


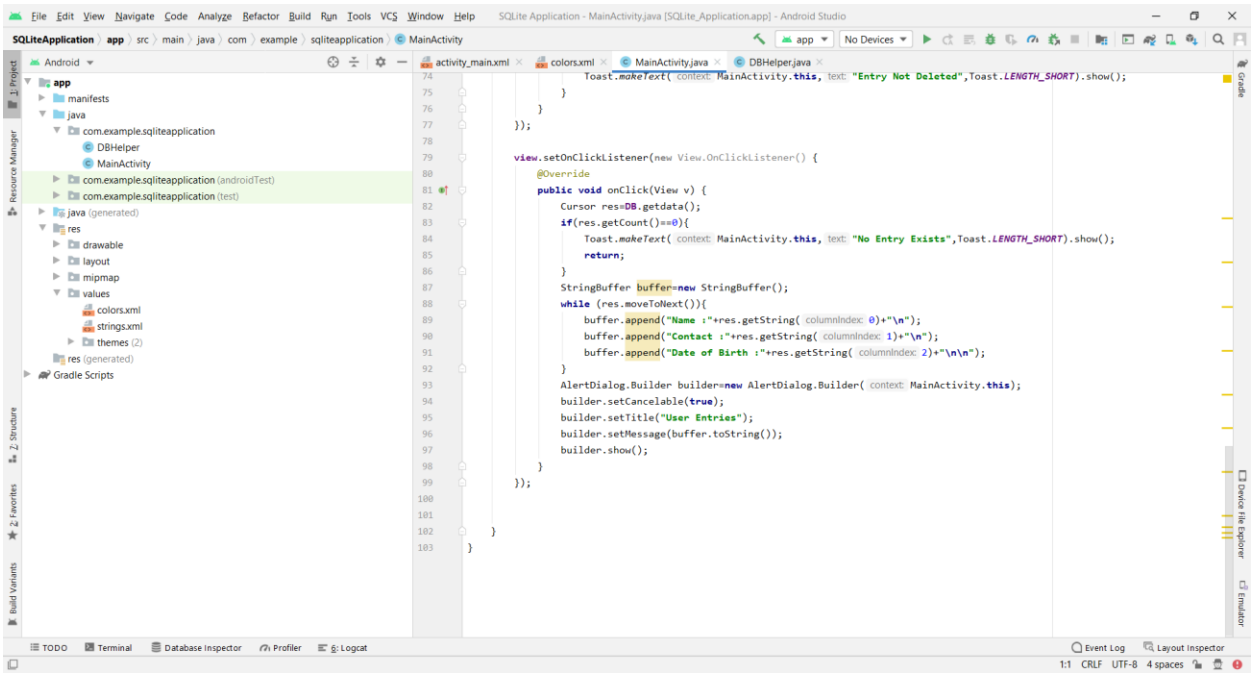
```
    <EditText
        android:id="@+id/dob"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/contact"
        android:hint="Date Of Birth"
        android:inputType="number"
        android:textSize="24dp" />

    <Button
        android:id="@+id/buttonInsert"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/dob"
        android:layout_marginTop="30dp"
        android:text="Insert New Data"
        android:textSize="24dp"
        app:backgroundTint="#00897B" />

    <Button
        android:id="@+id/buttonUpdate"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/buttonInsert"
        android:text="Update Data"

        android:textSize="24dp"
        app:backgroundTint="#FFB300" />

    <Button
        android:id="@+id/buttonDelete"
        android:layout_width="match_parent"
```

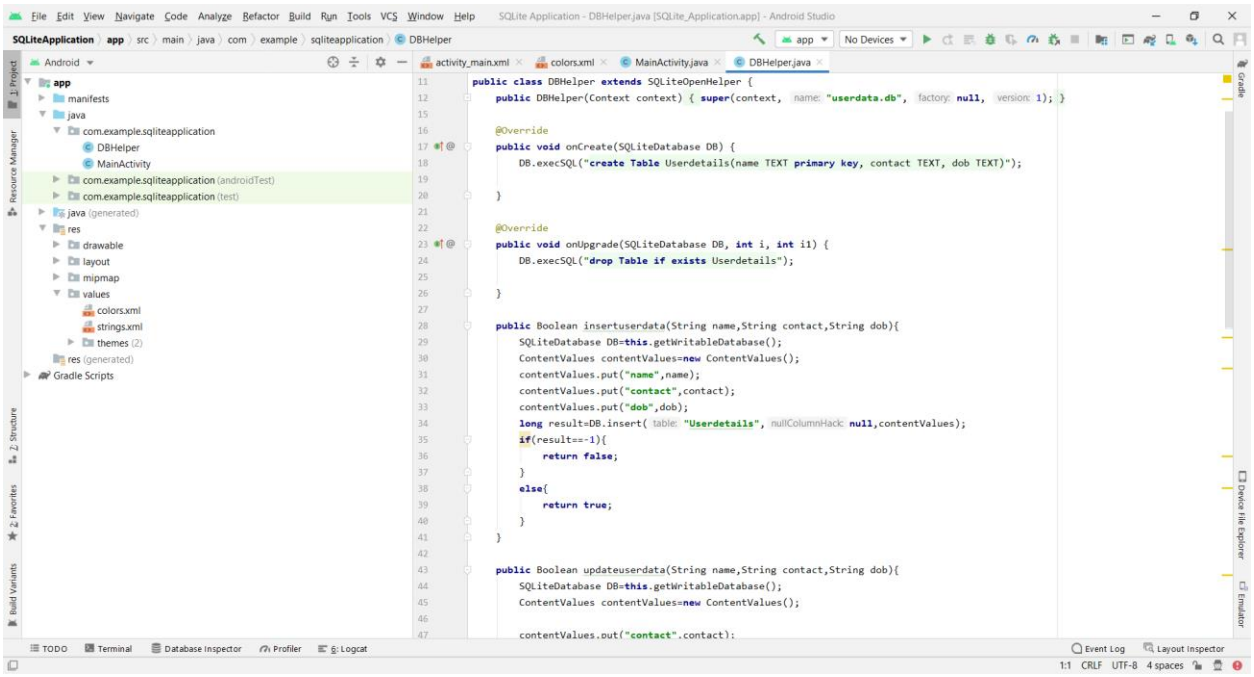

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
SQLite Application - activity_main.xml [SQLite_Application.app] - Android Studio
SQLiteApplication app src main res layout activity_main.xml
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
DBHelper.java
Code
Split
Design
app
manifests
java
com.example.sqliteapplication
DBHelper
MainActivity
com.example.sqliteapplication (androidTest)
com.example.sqliteapplication (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
android:text="Update Data"
android:textSize="24dp"
app:backgroundTint="#FFB300" />
<Button
android:id="@+id/buttonDelete"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_below="@+id/buttonUpdate"
android:text="Delete Data"
android:textSize="24dp"
app:backgroundTint="#D81B60" />
<Button
android:id="@+id/buttonView"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_below="@+id/buttonDelete"
android:text="View Existing Data"
android:textSize="24dp"
app:backgroundTint="#4B8547" />
</RelativeLayout>
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces

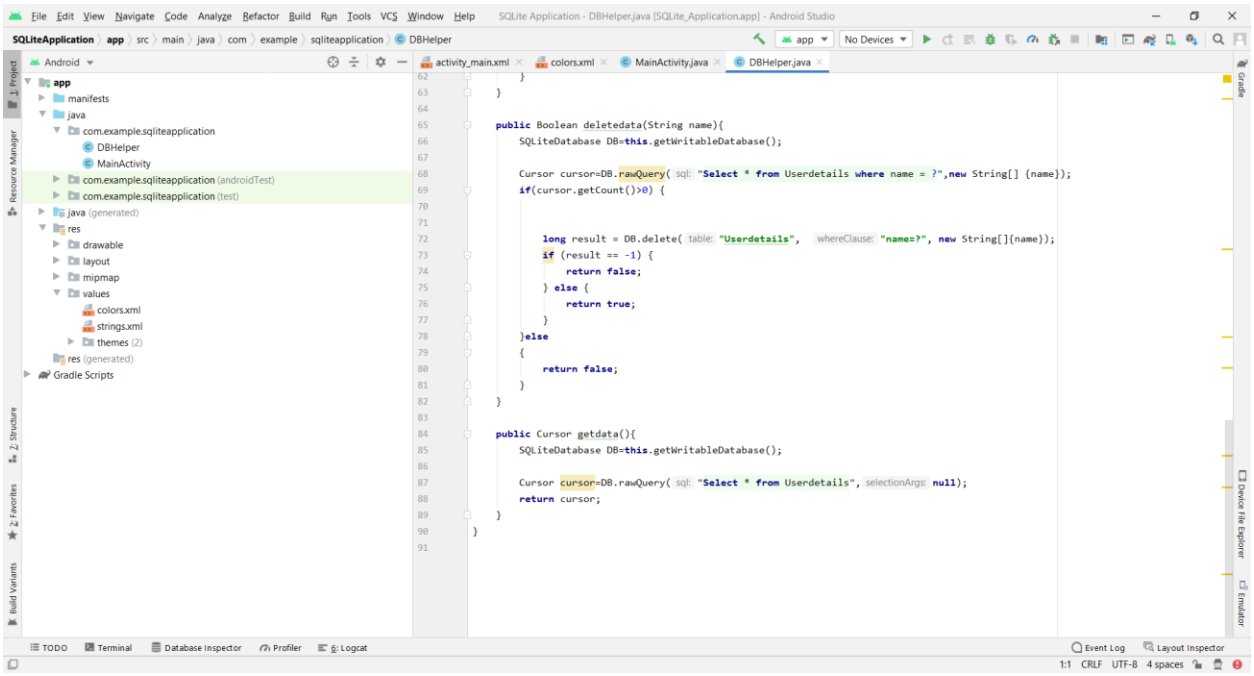
Java File:-


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
SQLite Application - MainActivity.java [SQLite_Application.app] - Android Studio
SQLiteApplication app src main java com example sqliteapplication MainActivity
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
DBHelper.java
app
manifests
java
com.example.sqliteapplication
DBHelper
MainActivity
com.example.sqliteapplication (androidTest)
com.example.sqliteapplication (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
public class MainActivity extends AppCompatActivity {
EditText name,contact,dob;
Button insert,update,delete,view;
DBHelper DB;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
name=findViewById(R.id.name);
contact=findViewById(R.id.contact);
dob=findViewById(R.id.dob);
insert=findViewById(R.id.buttonInsert);
update=findViewById(R.id.buttonUpdate);
delete=findViewById(R.id.buttonDelete);
view=findViewById(R.id.buttonView);
DB=new DBHelper(context: this);
insert.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
String nameTXT=name.getText().toString();
String contactTXT=contact.getText().toString();
String dobTXT=dob.getText().toString();
Boolean checkinsertdata=DB.insertuserdata(nameTXT,contactTXT,dobTXT);
if(checkinsertdata==true){
Toast.makeText(context: MainActivity.this, text: "New Entry Inseted",Toast.LENGTH_SHORT).show();
}else{
Toast.makeText(context: MainActivity.this, text: "New Entry Not Inseted",Toast.LENGTH_SHORT).show();
}
}
});
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
SQLite Application - MainActivity.java [SQLite_Application.app] - Android Studio
SQLiteApplication app src main java com example sqliteapplication MainActivity
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
DBHelper.java
app
manifests
java
com.example.sqliteapplication
DBHelper
MainActivity
com.example.sqliteapplication (androidTest)
com.example.sqliteapplication (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
update.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
String nameTXT=name.getText().toString();
String contactTXT=contact.getText().toString();
String dobTXT=dob.getText().toString();
Boolean checkupdatedata=DB.updateuserdata(nameTXT,contactTXT,dobTXT);
if(checkupdatedata==true){
Toast.makeText(context: MainActivity.this, text: "Entry Updated",Toast.LENGTH_SHORT).show();
}else{
Toast.makeText(context: MainActivity.this, text: "Entry Not Updated",Toast.LENGTH_SHORT).show();
}
}
});
delete.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
String nameTXT=name.getText().toString();
Boolean checkdeletedata=DB.deletedata(nameTXT);
if(checkdeletedata==true){
Toast.makeText(context: MainActivity.this, text: "Entry Deleted",Toast.LENGTH_SHORT).show();
}else{
Toast.makeText(context: MainActivity.this, text: "Entry Not Deleted",Toast.LENGTH_SHORT).show();
}
}
});
view.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
Cursor res=DB.getdata();
if(res.getCount()==0){
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces

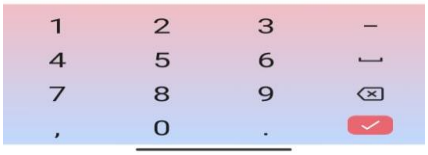

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
SQLite Application - MainActivity.java [SQLite_Application.app] - Android Studio
SQLiteApplication app src main java com example sqliteapplication MainActivity
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
DBHelper.java
app
manifests
java
com.example.sqliteapplication
DBHelper
MainActivity
com.example.sqliteapplication (androidTest)
com.example.sqliteapplication (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
Toast.makeText(context: MainActivity.this, text: "Entry Not Deleted",Toast.LENGTH_SHORT).show();
}
}
});
view.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
Cursor res=DB.getdata();
if(res.getCount()==0){
Toast.makeText(context: MainActivity.this, text: "No Entry Exists",Toast.LENGTH_SHORT).show();
return;
}
StringBuffer buffer=new StringBuffer();
while (res.moveToNext()){
buffer.append("Name :"+res.getString(columnIndex: 0)+"\n");
buffer.append("Contact :"+res.getString(columnIndex: 1)+"\n");
buffer.append("Date of Birth :"+res.getString(columnIndex: 2)+"\n\n");
}
AlertDialog.Builder builder=new AlertDialog.Builder(context: MainActivity.this);
builder.setCancelable(true);
builder.setTitle("User Entries");
builder.setMessage(buffer.toString());
builder.show();
}
});
}
}
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces

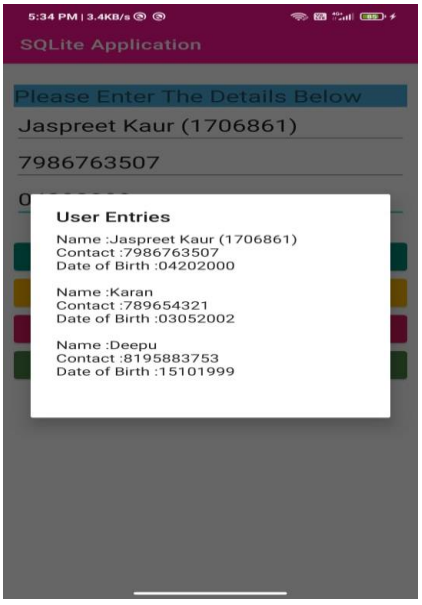

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
SQLite Application - DBHelper.java [SQLite_Application.app] - Android Studio
SQLiteApplication app src main java com example sqliteapplication DBHelper
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
DBHelper.java
app
manifests
java
com.example.sqliteapplication
DBHelper
MainActivity
com.example.sqliteapplication (androidTest)
com.example.sqliteapplication (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
public class DBHelper extends SQLiteOpenHelper {
public DBHelper(Context context) { super(context, name: "userdata.db", factory: null, version: 1); }
@Override
public void onCreate(SQLiteDatabase DB) {
DB.execSQL("create Table Userdetails(name TEXT primary key, contact TEXT, dob TEXT)");
}
@Override
public void onUpgrade(SQLiteDatabase DB, int i, int i1) {
DB.execSQL("drop Table if exists Userdetails");
}
public Boolean insertuserdata(String name,String contact,String dob){
SQLiteDatabase DB=this.getWritableDatabase();
ContentValues contentValues=new ContentValues();
contentValues.put("name",name);
contentValues.put("contact",contact);
contentValues.put("dob",dob);
long result=DB.insert(table: "Userdetails", nullColumnHack: null,contentValues);
if(result==-1){
return false;
}
else{
return true;
}
}
public Boolean updateuserdata(String name,String contact,String dob){
SQLiteDatabase DB=this.getWritableDatabase();
ContentValues contentValues=new ContentValues();
contentValues.put("contact",contact);
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
SQLite Application - DBHelper.java [SQLite_Application.app] - Android Studio
SQLiteApplication app src main java com example sqliteapplication DBHelper
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
DBHelper.java
app
manifests
java
com.example.sqliteapplication
DBHelper
MainActivity
com.example.sqliteapplication (androidTest)
com.example.sqliteapplication (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
}
}
public Boolean deletedata(String name){
SQLiteDatabase DB=this.getWritableDatabase();
Cursor cursor=DB.rawQuery(sql: "Select * from Userdetails where name = ?",new String[] {name});
if(cursor.getCount()>0) {
long result = DB.delete(table: "Userdetails", whereClause: "name=?", new String[]{name});
if (result == -1) {
return false;
} else {
return true;
}
}else
{
return false;
}
}
public Cursor getdata(){
SQLiteDatabase DB=this.getWritableDatabase();
Cursor cursor=DB.rawQuery(sql: "Select * from Userdetails", selectionArgs: null);
return cursor;
}
}
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces

OUTPUT:-

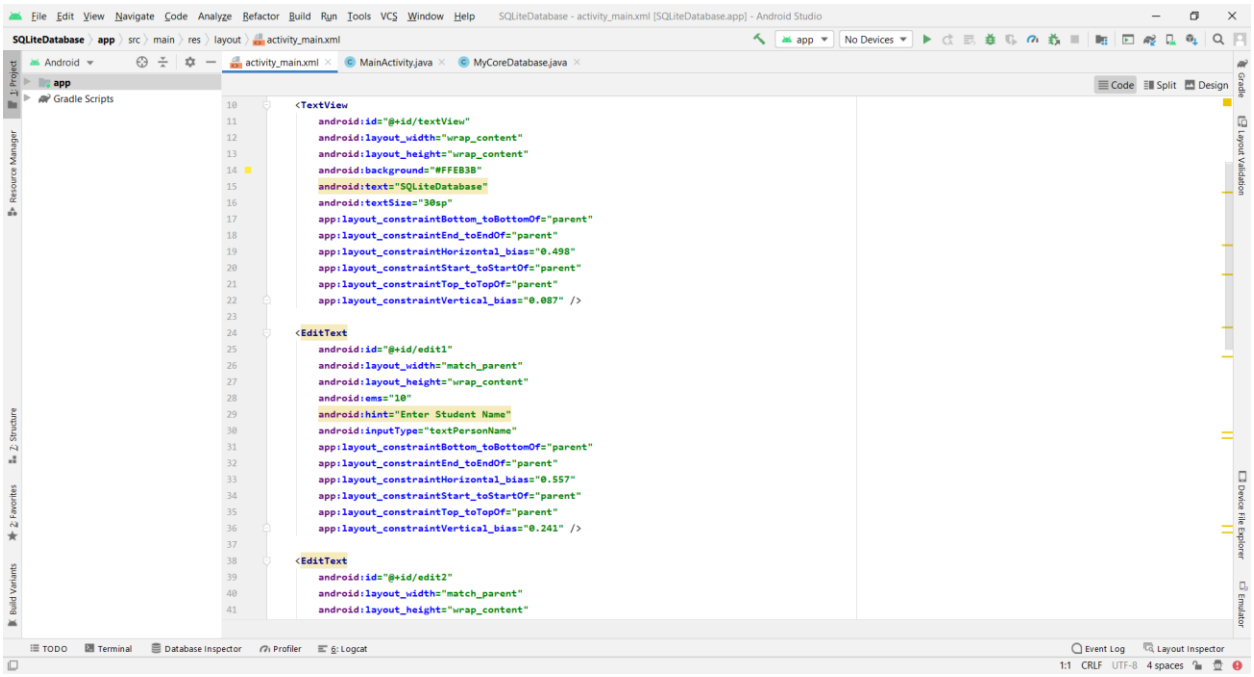

5:33 PM | 0.1KB/s
SQLite Application
Please Enter The Details Below
Jaspreet Kaur (1706861)
7986763507
04202000
INSERT NEW DATA
UPDATE DATA
DELETE DATA
VIEW EXISTING DATA


1 2 3 –
4 5 6
7 8 9
, 0 .

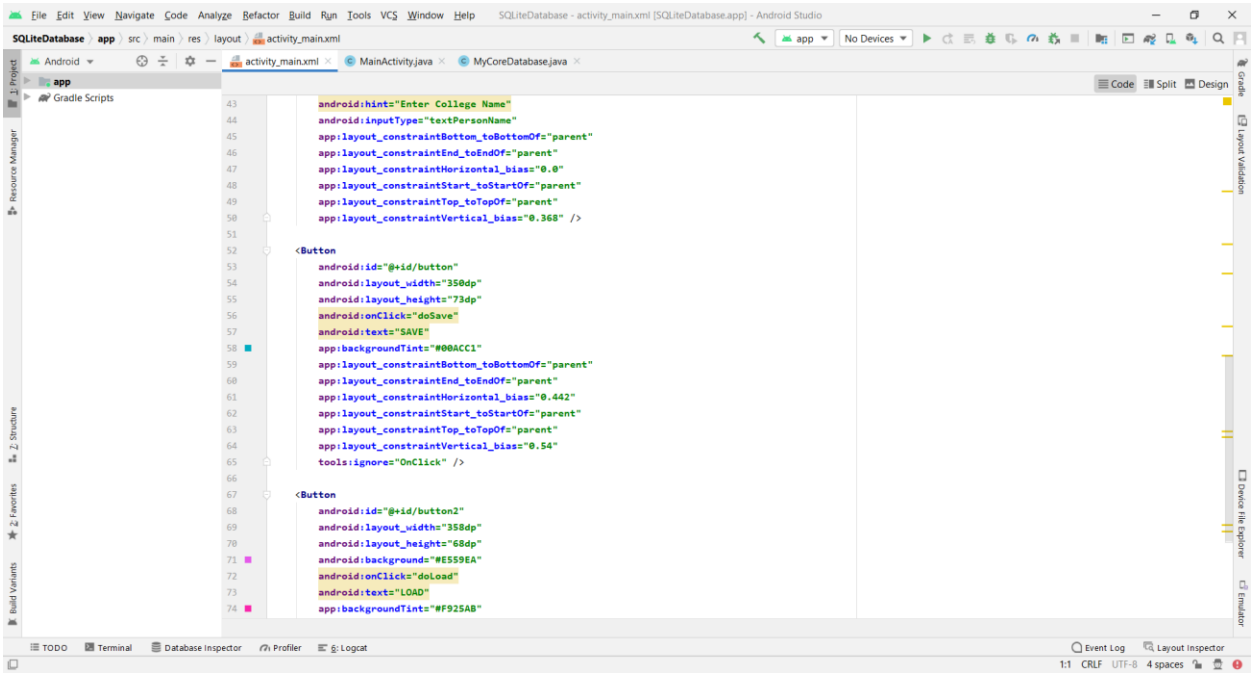

5:34 PM | 3.4KB/s
SQLite Application
Please Enter The Details Below
Jaspreet Kaur (1706861)
7986763507
User Entries
Name :Jaspreet Kaur (1706861)
Contact :7986763507
Date of Birth :04202000
Name :Karan
Contact :789654321
Date of Birth :03052002
Name :Deepu
Contact :8195883753
Date of Birth :15101999

Practical 9 :- Store Data Using SQLite Database

Xml File:-

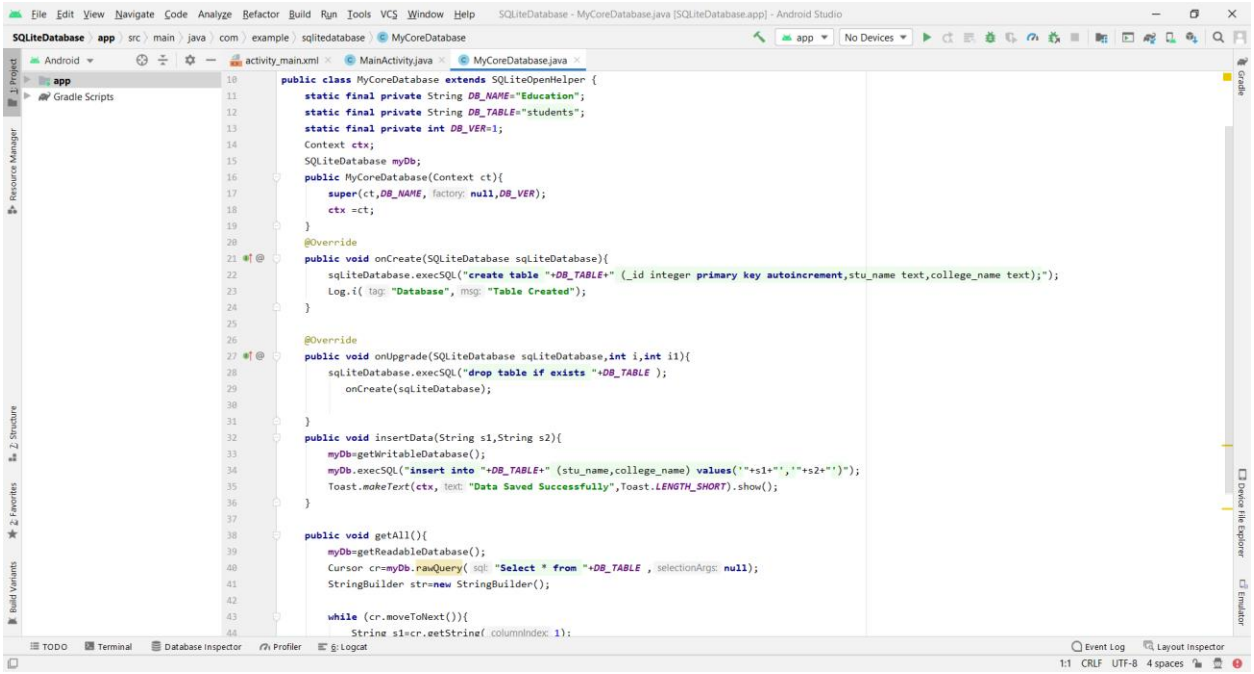


```
<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:background="#FFEB3B"
    android:text="SQLiteDatabase"
    android:textSize="30sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.087" />

<EditText
    android:id="@+id/edit1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter Student Name"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.557"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.241" />

<EditText
    android:id="@+id/edit2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
```

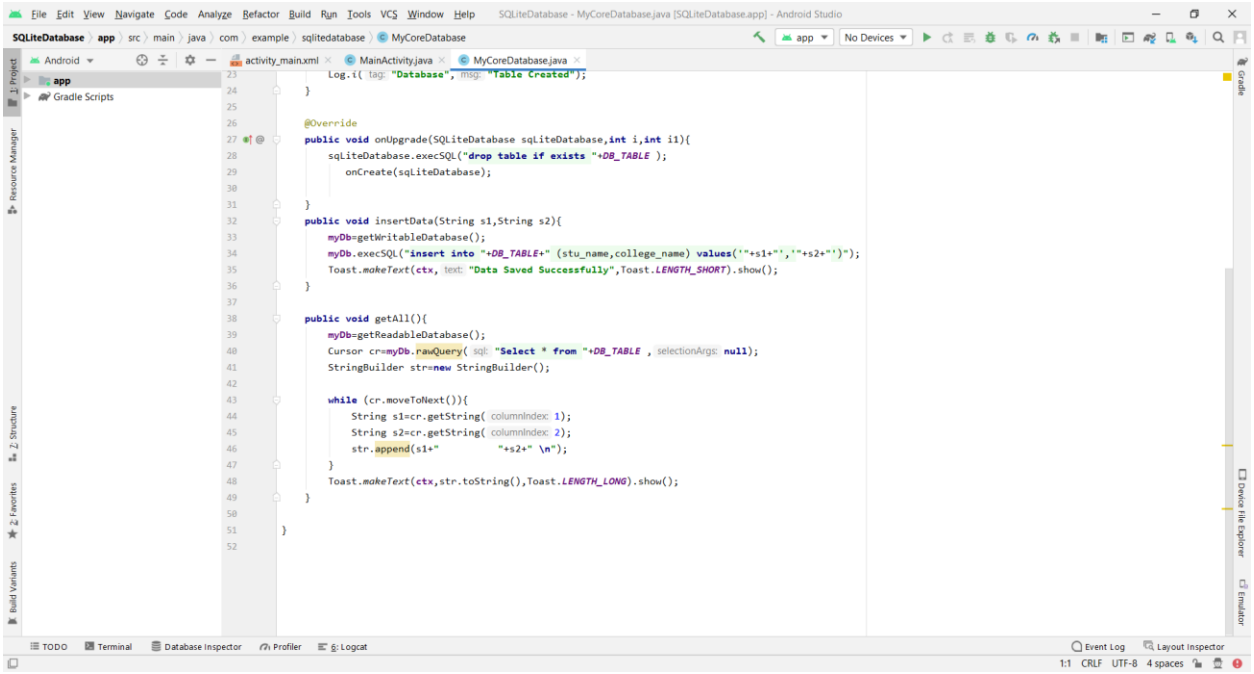


```
    android:hint="Enter College Name"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.368" />

<Button
    android:id="@+id/button"
    android:layout_width="350dp"
    android:layout_height="73dp"
    android:onClick="doSave"
    android:text="SAVE"
    app:backgroundTint="#00ACC1"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.442"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.54"
    tools:ignore="OnClick" />

<Button
    android:id="@+id/button2"
    android:layout_width="358dp"
    android:layout_height="68dp"
    android:background="#E559EA"
    android:onClick="doLoad"
    android:text="LOAD"
    app:backgroundTint="#F925AB"
```

Java File:-

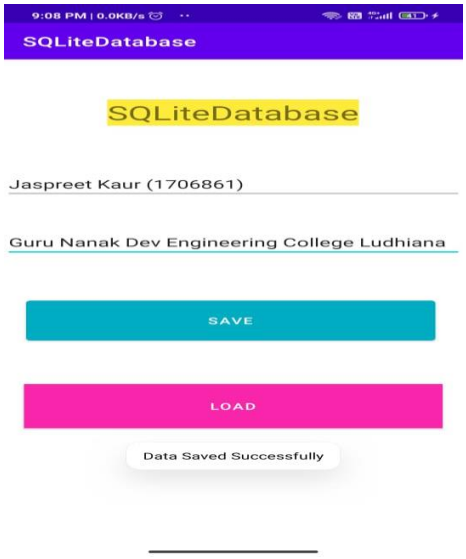


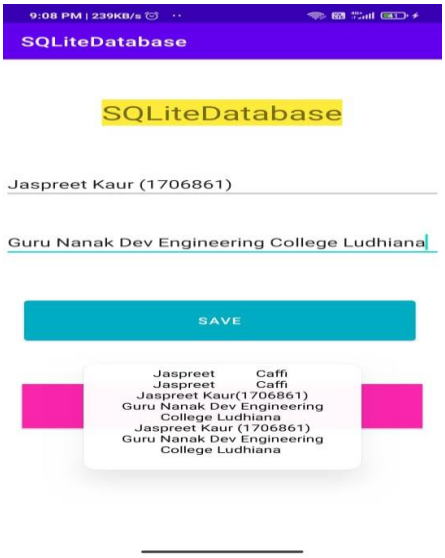
```
public class MyCoreDatabase extends SQLiteOpenHelper {
    static final private String DB_NAME="Education";
    static final private String DB_TABLE="students";
    static final private int DB_VER=1;
    Context ctx;
    SQLiteDatabase myDb;
    public MyCoreDatabase(Context ct){
        super(ct,DB_NAME, factory: null,DB_VER);
        ctx =ct;
    }
    @Override
    public void onCreate(SQLiteDatabase sqLiteDatabase){
        sqLiteDatabase.execSQL("create table "+DB_TABLE+" (_id integer primary key autoincrement,stu_name text,college_name text);");
        Log.i( tag: "Database", msg: "Table Created");
    }

    @Override
    public void onUpgrade(SQLiteDatabase sqLiteDatabase,int i,int i1){
        sqLiteDatabase.execSQL("drop table if exists "+DB_TABLE );
           onCreate(sqLiteDatabase);

    }
    public void insertData(String s1,String s2){
        myDb=getWritableDatabase();
        myDb.execSQL("insert into "+DB_TABLE+" (stu_name,college_name) values('"+s1+"','"+s2+"')");
        Toast.makeText(ctx, text: "Data Saved Successfully",Toast.LENGTH_SHORT).show();
    }

    public void getAll(){
        myDb=getReadableDatabase();
        Cursor cr=myDb.rawQuery( sql: "Select * from "+DB_TABLE , selectionArgs: null);
        StringBuilder str=new StringBuilder();

        while (cr.moveToNext()){
            String s1=cr.getString( columnIndex: 1);
```



```
        Log.i( tag: "Database", msg: "Table Created");
    }

    @Override
    public void onUpgrade(SQLiteDatabase sqLiteDatabase,int i,int i1){
        sqLiteDatabase.execSQL("drop table if exists "+DB_TABLE );
           onCreate(sqLiteDatabase);

    }
    public void insertData(String s1,String s2){
        myDb=getWritableDatabase();
        myDb.execSQL("insert into "+DB_TABLE+" (stu_name,college_name) values('"+s1+"','"+s2+"')");
        Toast.makeText(ctx, text: "Data Saved Successfully",Toast.LENGTH_SHORT).show();
    }

    public void getAll(){
        myDb=getReadableDatabase();
        Cursor cr=myDb.rawQuery( sql: "Select * from "+DB_TABLE , selectionArgs: null);
        StringBuilder str=new StringBuilder();

        while (cr.moveToNext()){
            String s1=cr.getString( columnIndex: 1);
            String s2=cr.getString( columnIndex: 2);
            str.append(s1+"          "+s2+" \n");
        }
        Toast.makeText(ctx,str.toString(),Toast.LENGTH_LONG).show();
    }

}
```

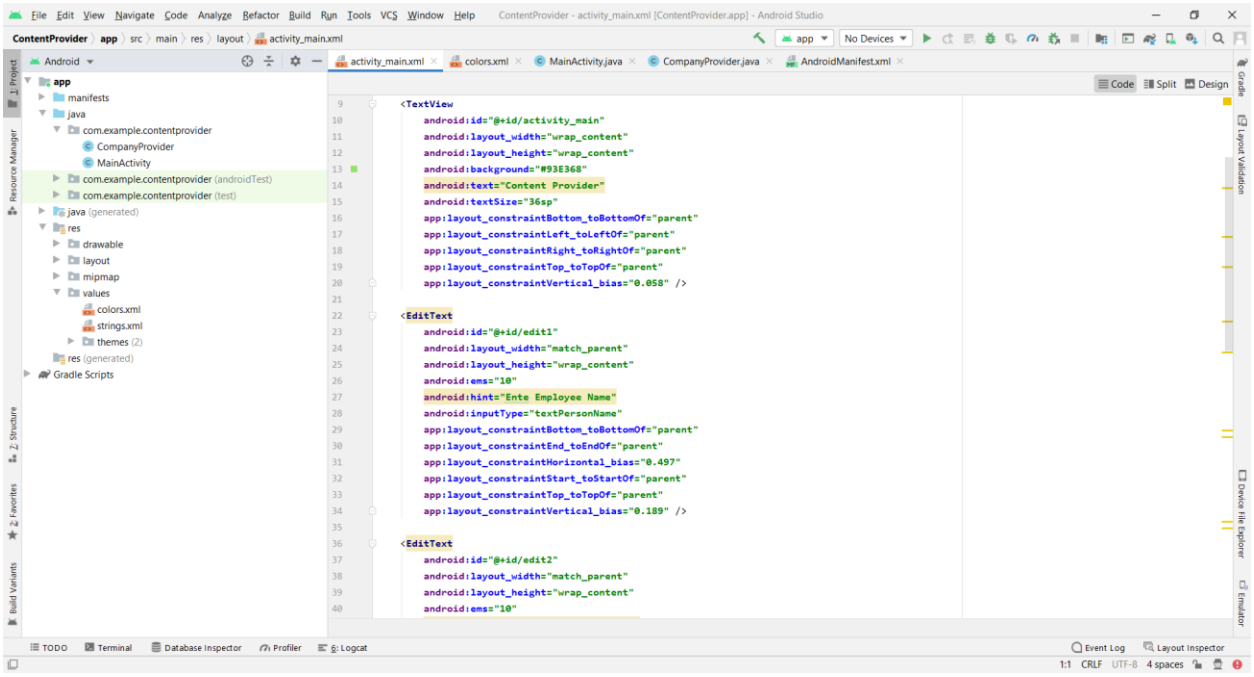
OUTPUT:-

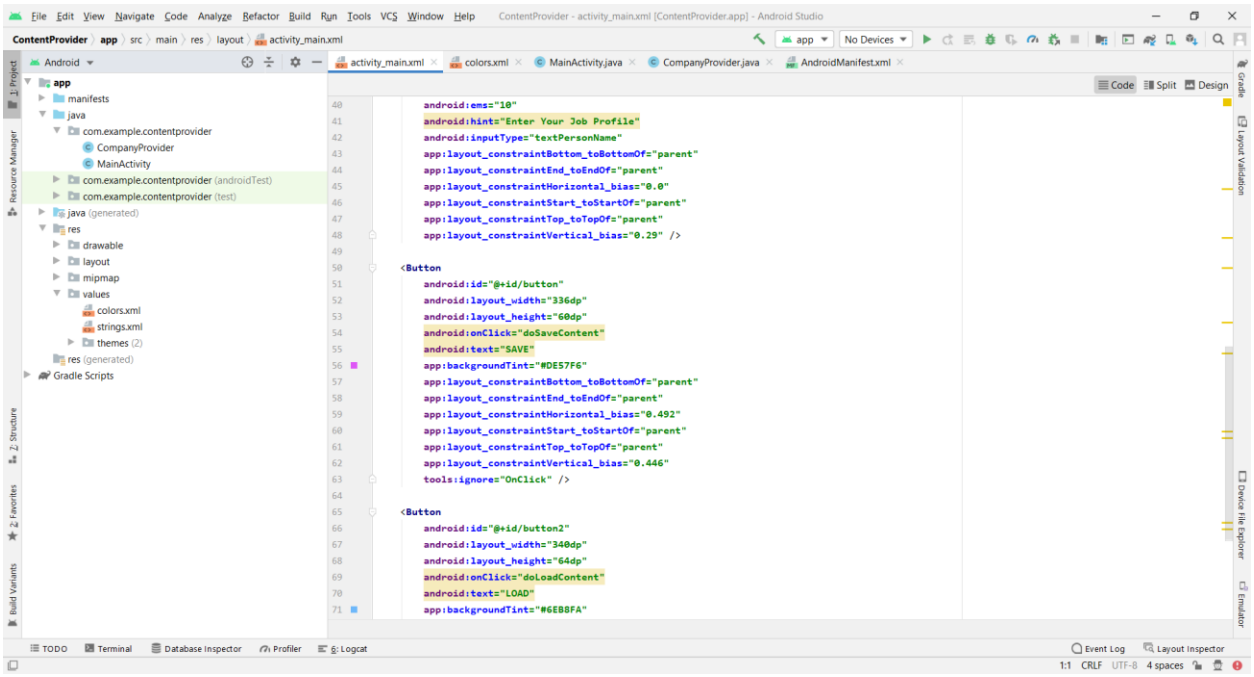

9:08 PM | 0.0KB/s
SQLiteDatabase
SQLiteDatabase
Jaspreet Kaur (1706861)
Guru Nanak Dev Engineering College Ludhiana
SAVE
LOAD
Data Saved Successfully


9:08 PM | 239KB/s
SQLiteDatabase
SQLiteDatabase
Jaspreet Kaur (1706861)
Guru Nanak Dev Engineering College Ludhiana
SAVE
Jaspreet Caffi
Jaspreet Caffi
Jaspreet Kaur(1706861)
Guru Nanak Dev Engineering College Ludhiana
Jaspreet Kaur (1706861)
Guru Nanak Dev Engineering College Ludhiana

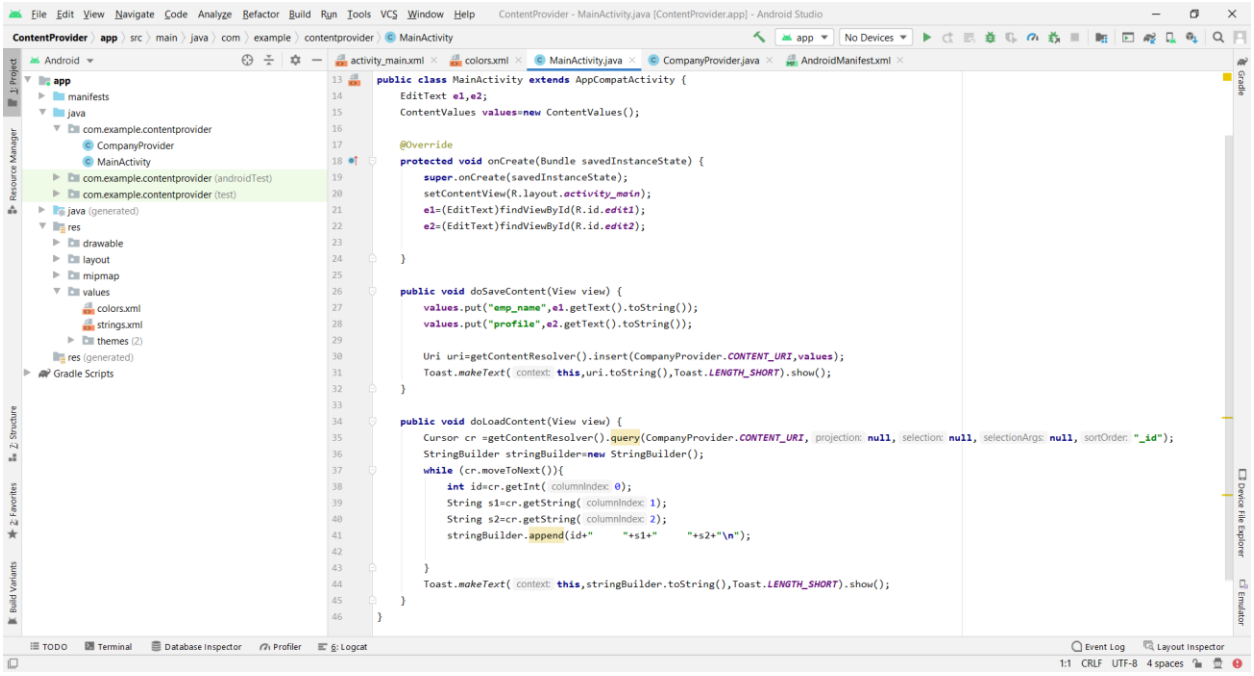
PRACTICAL 10:- CONTENT PROVIDER

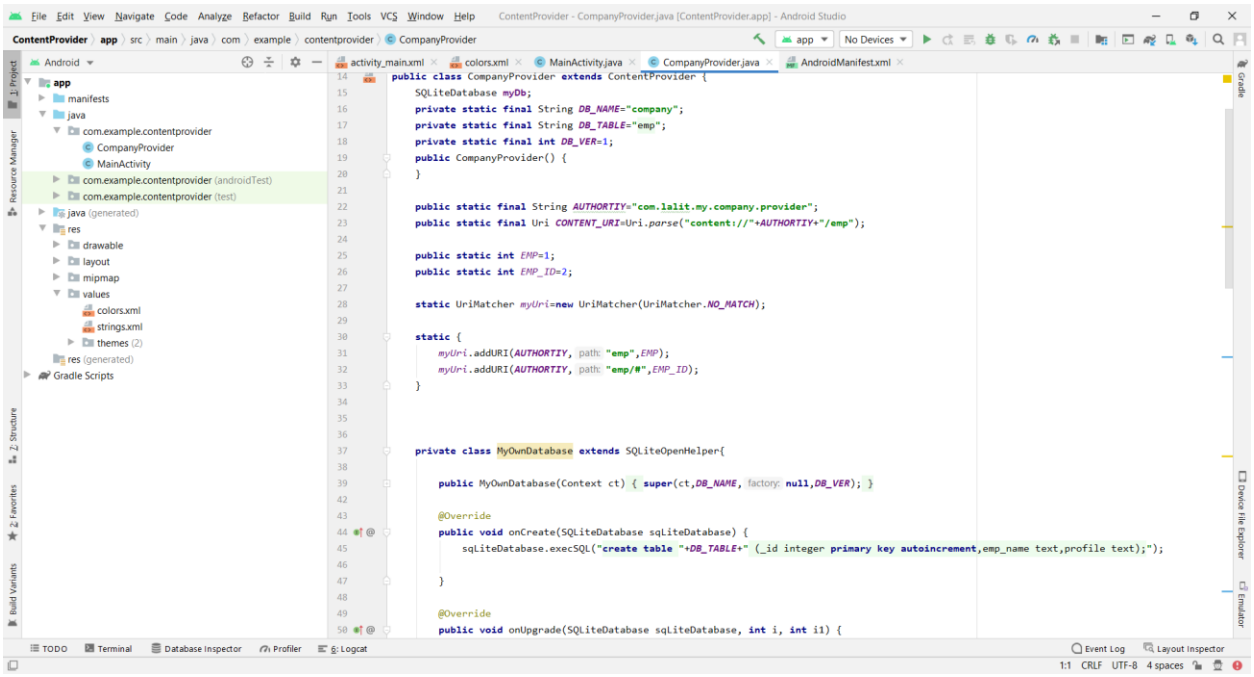
Xml File:-

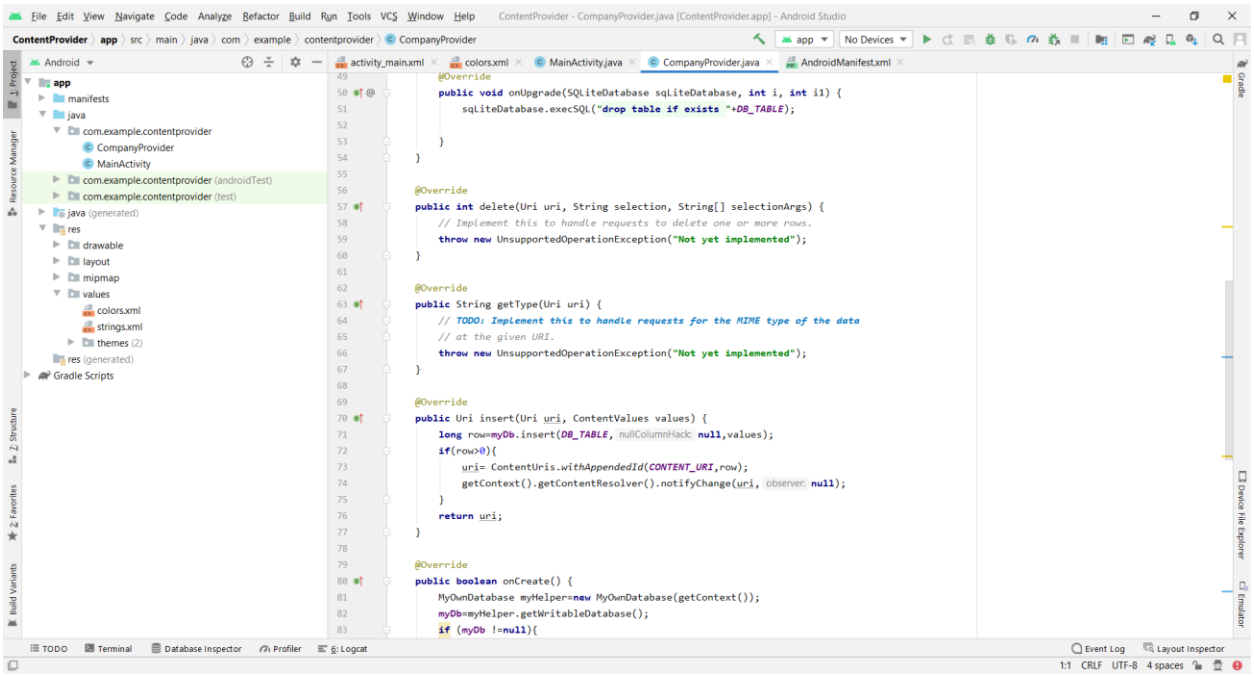


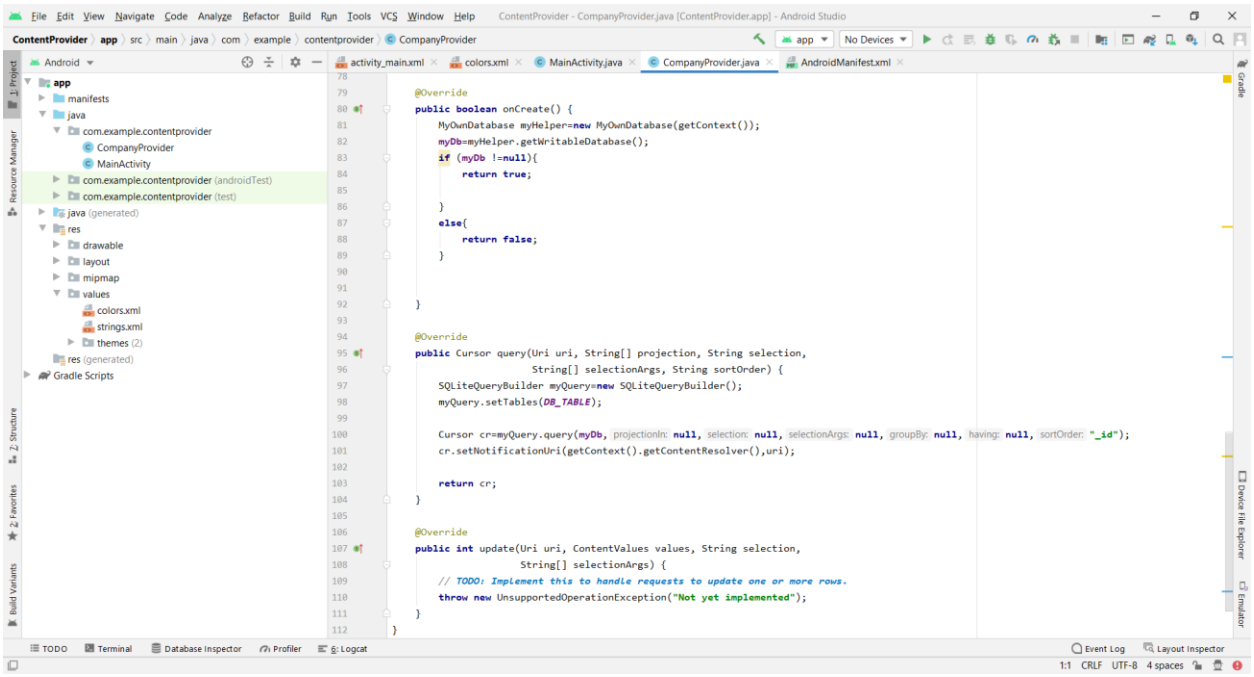

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
ContentProvider - activity_main.xml [ContentProvider.app] - Android Studio
ContentProvider app src main res layout activity_main.xml
app No Devices
Android
activity_main.xml colors.xml MainActivity.java CompanyProvider.java AndroidManifest.xml
Code Split Design
app
manifests
java
com.example.contentprovider
CompanyProvider
MainActivity
com.example.contentprovider (androidTest)
com.example.contentprovider (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
android:ems="10"
android:hint="Enter Your Job Profile"
android:inputType="textPersonName"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.0"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.29" />
<Button
android:id="@+id/button"
android:layout_width="336dp"
android:layout_height="60dp"
android:onClick="doSaveContent"
android:text="SAVE"
app:backgroundTint="#DE57F6"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.492"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.446"
tools:ignore="OnClick" />
<Button
android:id="@+id/button2"
android:layout_width="340dp"
android:layout_height="64dp"
android:onClick="doLoadContent"
android:text="LOAD"
app:backgroundTint="#6EB8FA"
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
1:1 CRLF UTF-8 4 spaces

Java File:-

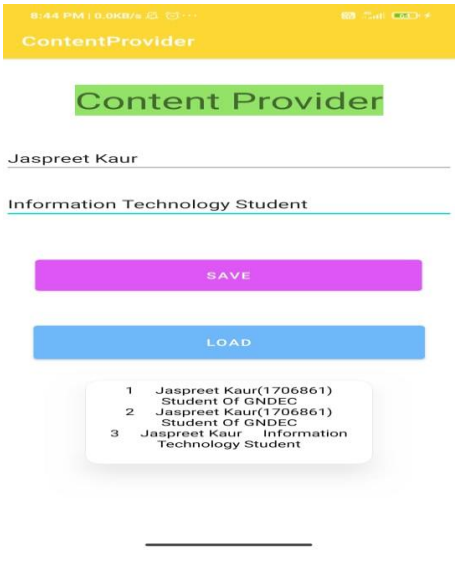

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
ContentProvider - MainActivity.java [ContentProvider.app] - Android Studio
ContentProvider app src main java com example contentprovider MainActivity
app No Devices
Android
activity_main.xml colors.xml MainActivity.java CompanyProvider.java AndroidManifest.xml
app
manifests
java
com.example.contentprovider
CompanyProvider
MainActivity
com.example.contentprovider (androidTest)
com.example.contentprovider (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
public class MainActivity extends AppCompatActivity {
EditText e1,e2;
ContentValues values=new ContentValues();
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
e1=(EditText)findViewById(R.id.edit1);
e2=(EditText)findViewById(R.id.edit2);
}
public void doSaveContent(View view) {
values.put("emp_name",e1.getText().toString());
values.put("profile",e2.getText().toString());
Uri uri=getContentResolver().insert(CompanyProvider.CONTENT_URI,values);
Toast.makeText(context: this,uri.toString(),Toast.LENGTH_SHORT).show();
}
public void doLoadContent(View view) {
Cursor cr =getContentResolver().query(CompanyProvider.CONTENT_URI, projection: null, selection: null, selectionArgs: null, sortOrder: "_id");
StringBuilder stringBuilder=new StringBuilder();
while (cr.moveToNext()){
int id=cr.getInt(columnIndex: 0);
String s1=cr.getString(columnIndex: 1);
String s2=cr.getString(columnIndex: 2);
stringBuilder.append(id+" "+s1+" "+s2+"\n");
}
Toast.makeText(context: this,stringBuilder.toString(),Toast.LENGTH_SHORT).show();
}
}
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
ContentProvider - CompanyProvider.java [ContentProvider.app] - Android Studio
ContentProvider app src main java com example contentprovider CompanyProvider
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
CompanyProvider.java
AndroidManifest.xml
app
manifests
java
com.example.contentprovider
CompanyProvider
MainActivity
com.example.contentprovider (androidTest)
com.example.contentprovider (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
public class CompanyProvider extends ContentProvider {
SQLiteDatabase myDb;
private static final String DB_NAME="company";
private static final String DB_TABLE="emp";
private static final int DB_VER=1;
public CompanyProvider() {
}
public static final String AUTHORTIY="com.lalit.my.company.provider";
public static final Uri CONTENT_URI=Uri.parse("content://"+AUTHORTIY+"/emp");
public static int EMP=1;
public static int EMP_ID=2;
static UriMatcher myUri=new UriMatcher(UriMatcher.NO_MATCH);
static {
myUri.addURI(AUTHORTIY, path: "emp",EMP);
myUri.addURI(AUTHORTIY, path: "emp/#",EMP_ID);
}
private class MyOwnDatabase extends SQLiteOpenHelper{
public MyOwnDatabase(Context ct) { super(ct,DB_NAME, factory: null,DB_VER); }
@Override
public void onCreate(SQLiteDatabase sqLiteDatabase) {
sqLiteDatabase.execSQL("create table "+DB_TABLE+" (_id integer primary key autoincrement,emp_name text,profile text);");
}
@Override
public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
ContentProvider - CompanyProvider.java [ContentProvider.app] - Android Studio
ContentProvider app src main java com example contentprovider CompanyProvider
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
CompanyProvider.java
AndroidManifest.xml
app
manifests
java
com.example.contentprovider
CompanyProvider
MainActivity
com.example.contentprovider (androidTest)
com.example.contentprovider (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
@Override
public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {
sqLiteDatabase.execSQL("drop table if exists "+DB_TABLE);
}
@Override
public int delete(Uri uri, String selection, String[] selectionArgs) {
// Implement this to handle requests to delete one or more rows.
throw new UnsupportedOperationException("Not yet implemented");
}
@Override
public String getType(Uri uri) {
// TODO: Implement this to handle requests for the MIME type of the data
// at the given URI.
throw new UnsupportedOperationException("Not yet implemented");
}
@Override
public Uri insert(Uri uri, ContentValues values) {
long row=myDb.insert(DB_TABLE, nullColumnHack: null,values);
if(row>0){
uri= ContentUris.withAppendedId(CONTENT_URI,row);
getContext().getContentResolver().notifyChange(uri, observer: null);
}
return uri;
}
@Override
public boolean onCreate() {
MyOwnDatabase myHelper=new MyOwnDatabase(getContext());
myDb=myHelper.getWritableDatabase();
if (myDb !=null){
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces

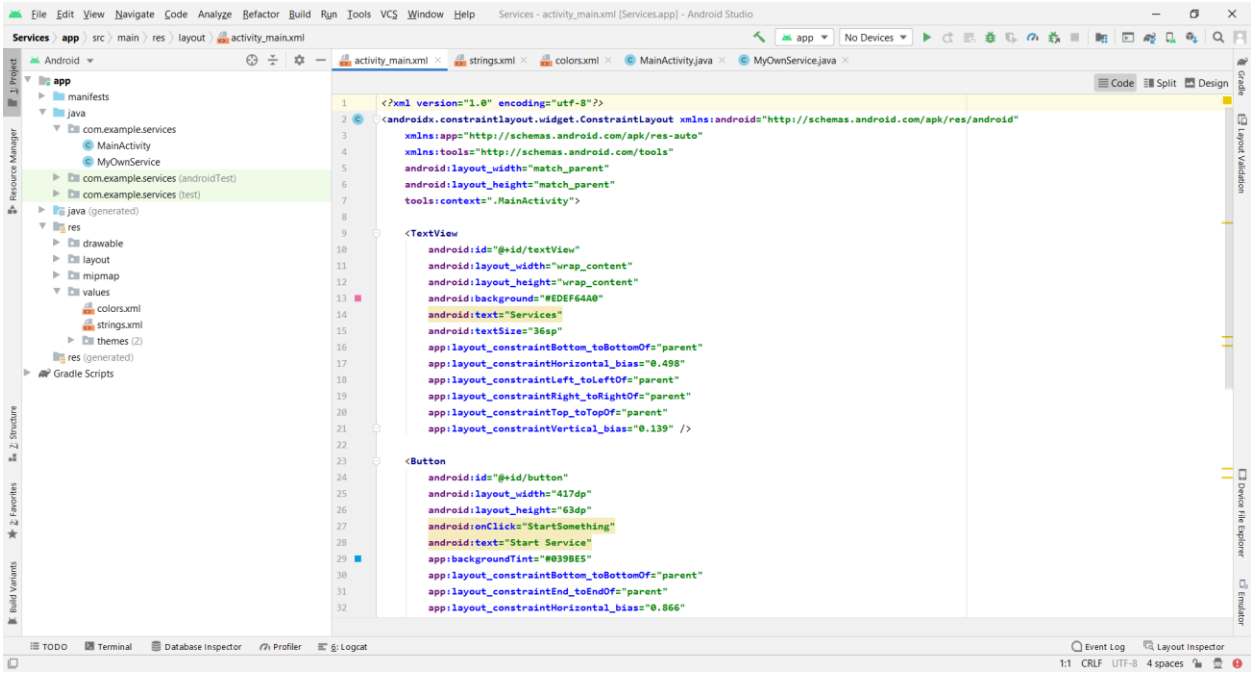

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
ContentProvider - CompanyProvider.java [ContentProvider.app] - Android Studio
ContentProvider app src main java com example contentprovider CompanyProvider
app
No Devices
Android
activity_main.xml
colors.xml
MainActivity.java
CompanyProvider.java
AndroidManifest.xml
app
manifests
java
com.example.contentprovider
CompanyProvider
MainActivity
com.example.contentprovider (androidTest)
com.example.contentprovider (test)
java (generated)
res
drawable
layout
mipmap
values
colors.xml
strings.xml
themes (2)
res (generated)
Gradle Scripts
@Override
public boolean onCreate() {
MyOwnDatabase myHelper=new MyOwnDatabase(getContext());
myDb=myHelper.getWritableDatabase();
if (myDb !=null){
return true;
}
else{
return false;
}
}
@Override
public Cursor query(Uri uri, String[] projection, String selection,
String[] selectionArgs, String sortOrder) {
SQLiteQueryBuilder myQuery=new SQLiteQueryBuilder();
myQuery.setTables(DB_TABLE);
Cursor cr=myQuery.query(myDb, projectionIn: null, selection: null, selectionArgs: null, groupBy: null, having: null, sortOrder: "_id");
cr.setNotificationUri(getContext().getContentResolver(),uri);
return cr;
}
@Override
public int update(Uri uri, ContentValues values, String selection,
String[] selectionArgs) {
// TODO: Implement this to handle requests to update one or more rows.
throw new UnsupportedOperationException("Not yet implemented");
}
}
TODO
Terminal
Database Inspector
Profiler
6: Logcat
Event Log
Layout Inspector
1:1 CRLF UTF-8 4 spaces

OUTPUT:-

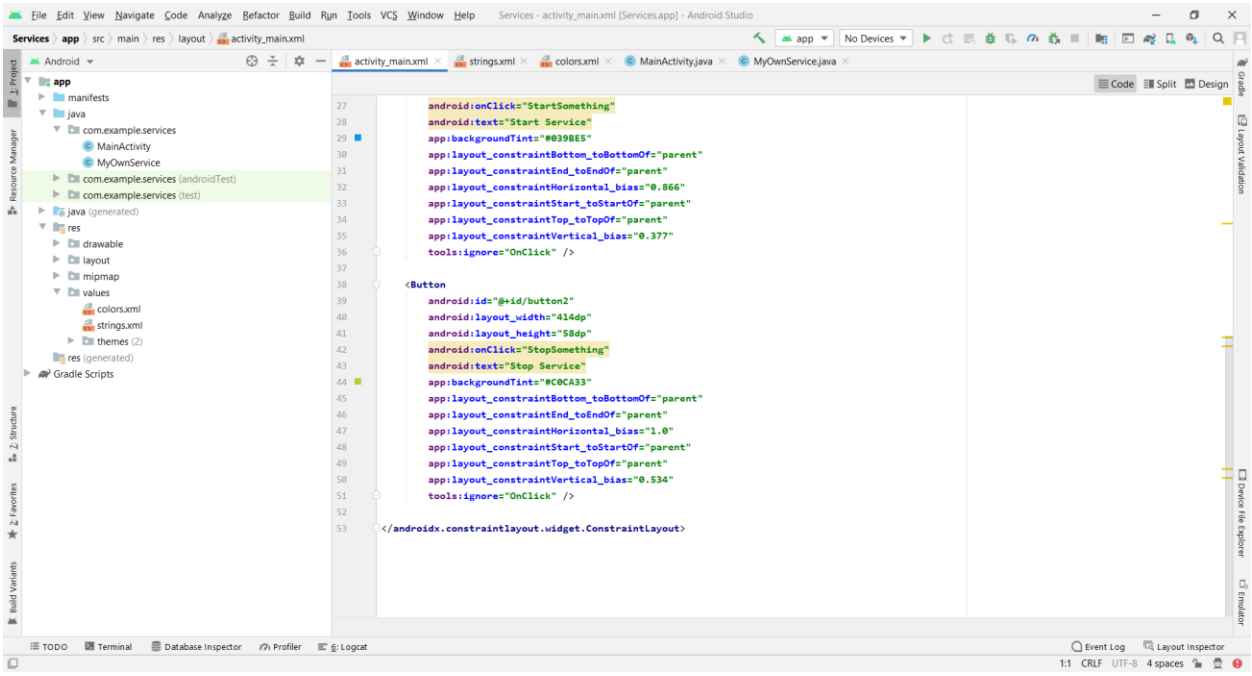

ContentProvider
Content Provider
Jaspreet Kaur
Information Technology Student
SAVE
LOAD
1 Jaspreet Kaur(1706861) Student Of GNDEC
2 Jaspreet Kaur(1706861) Student Of GNDEC
3 Jaspreet Kaur Information Technology Student

SERVICES

Xml File:-

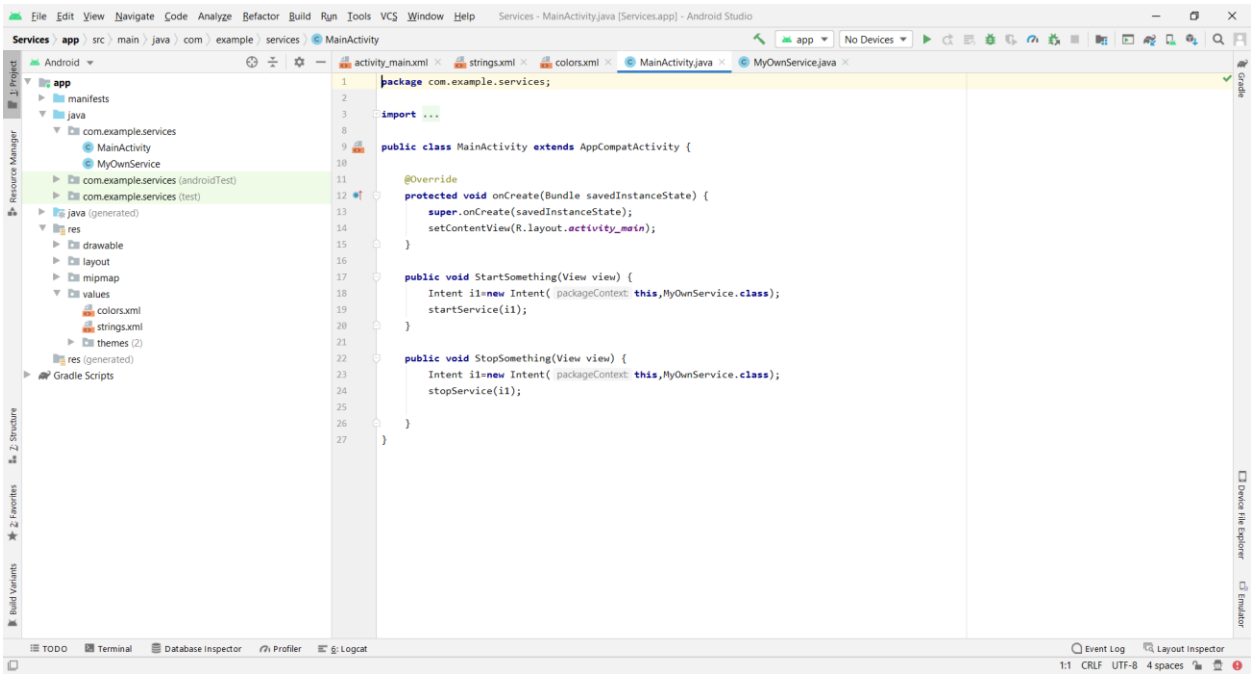


```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:background="#EDEF64A0"
        android:text="Services"
        android:textSize="36sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.139" />

    <Button
        android:id="@+id/button"
        android:layout_width="417dp"
        android:layout_height="63dp"
        android:onClick="StartSomething"
        android:text="Start Service"
        app:backgroundTint="#039BE5"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.866"
```

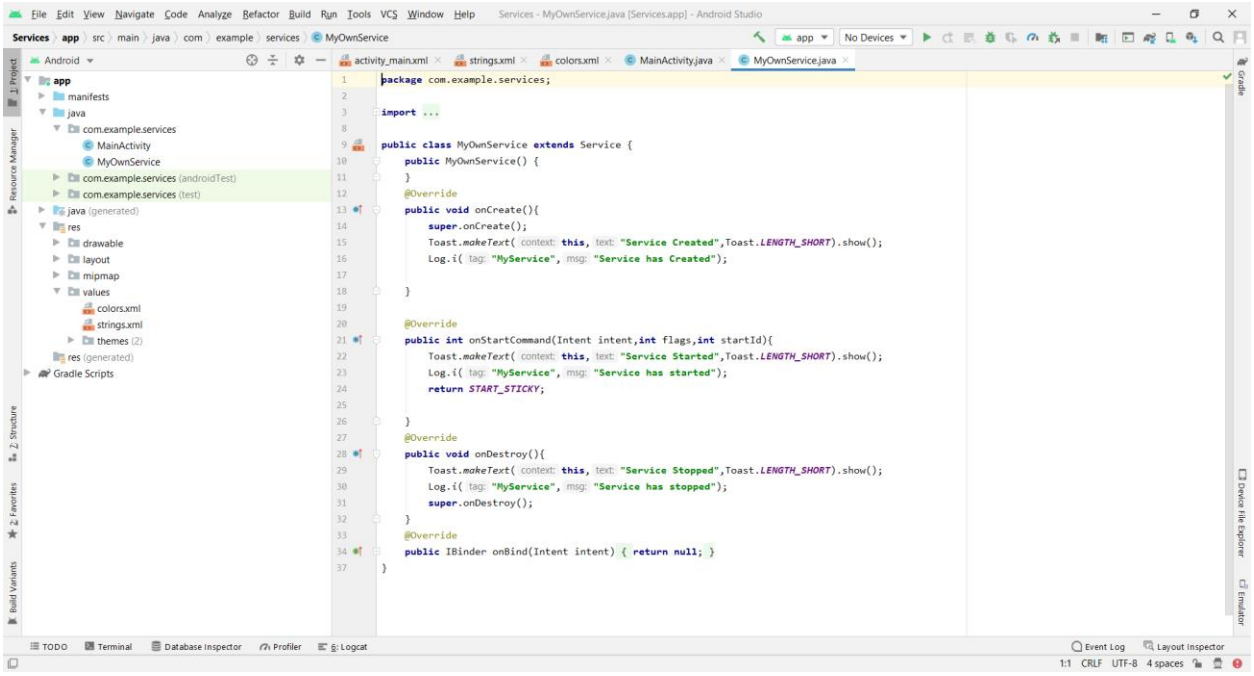


```
        android:onClick="StartSomething"
        android:text="Start Service"
        app:backgroundTint="#039BE5"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.866"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.377"
        tools:ignore="OnClick" />

    <Button
        android:id="@+id/button2"
        android:layout_width="414dp"
        android:layout_height="58dp"
        android:onClick="StopSomething"
        android:text="Stop Service"
        app:backgroundTint="#C0CA33"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.534"
        tools:ignore="OnClick" />

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

Java File:-

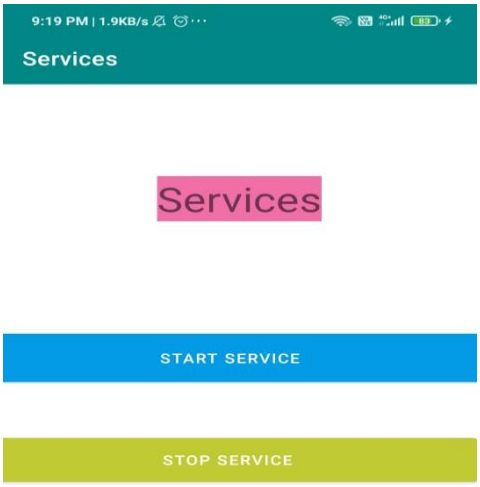


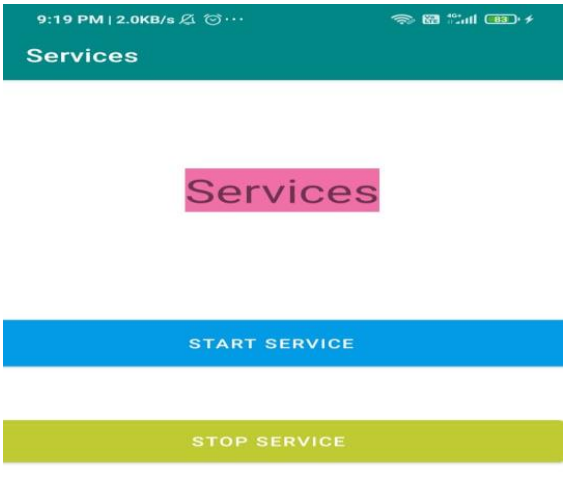
```
package com.example.services;

import ...

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void StartSomething(View view) {
        Intent i1=new Intent( packageContext: this,MyOwnService.class);
        startService(i1);
    }

    public void StopSomething(View view) {
        Intent i1=new Intent( packageContext: this,MyOwnService.class);
        stopService(i1);

    }
}
```



```
package com.example.services;

import ...

public class MyOwnService extends Service {
    public MyOwnService() {
    }
    @Override
    public void onCreate(){
        super.onCreate();
        Toast.makeText( context: this, text: "Service Created",Toast.LENGTH_SHORT).show();
        Log.i( tag: "MyService", msg: "Service has Created");

    }

    @Override
    public int onStartCommand(Intent intent,int flags,int startId){
        Toast.makeText( context: this, text: "Service Started",Toast.LENGTH_SHORT).show();
        Log.i( tag: "MyService", msg: "Service has started");
        return START_STICKY;

    }
    @Override
    public void onDestroy(){
        Toast.makeText( context: this, text: "Service Stopped",Toast.LENGTH_SHORT).show();
        Log.i( tag: "MyService", msg: "Service has stopped");
        super.onDestroy();
    }
    @Override
    public IBinder onBind(Intent intent) { return null; }
}
```

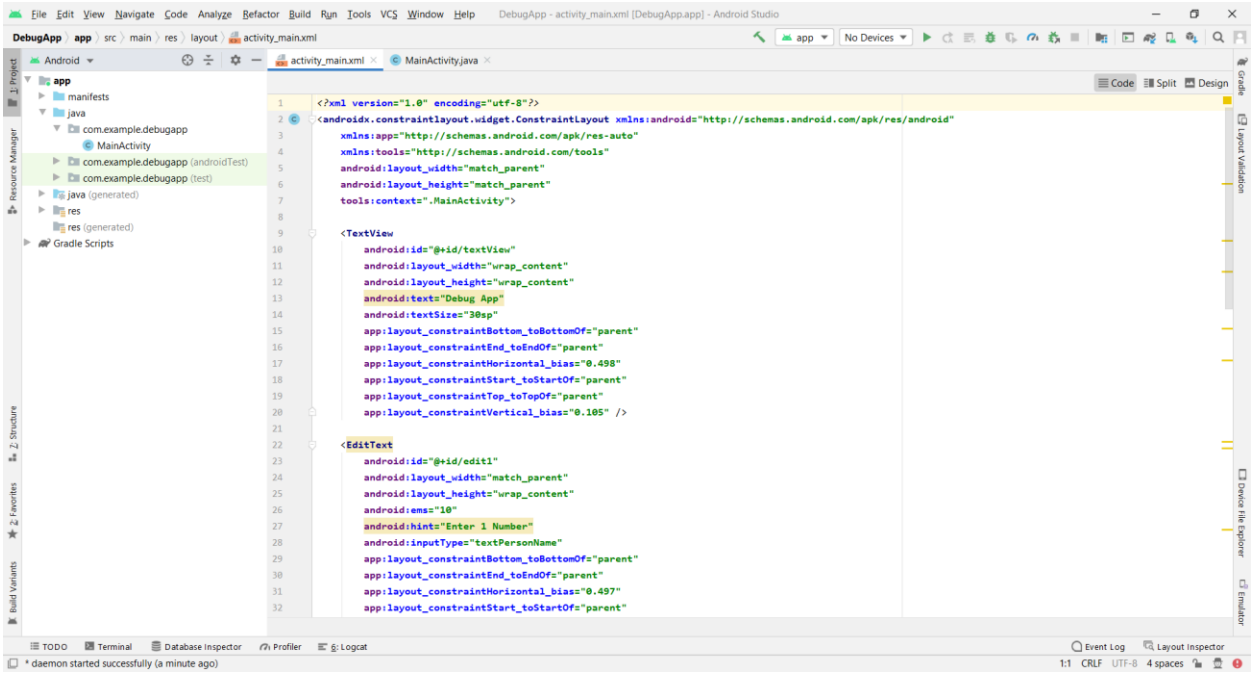
OUTPUT:-


9:19 PM | 1.9KB/s
Services
Services
START SERVICE
STOP SERVICE
Service Started

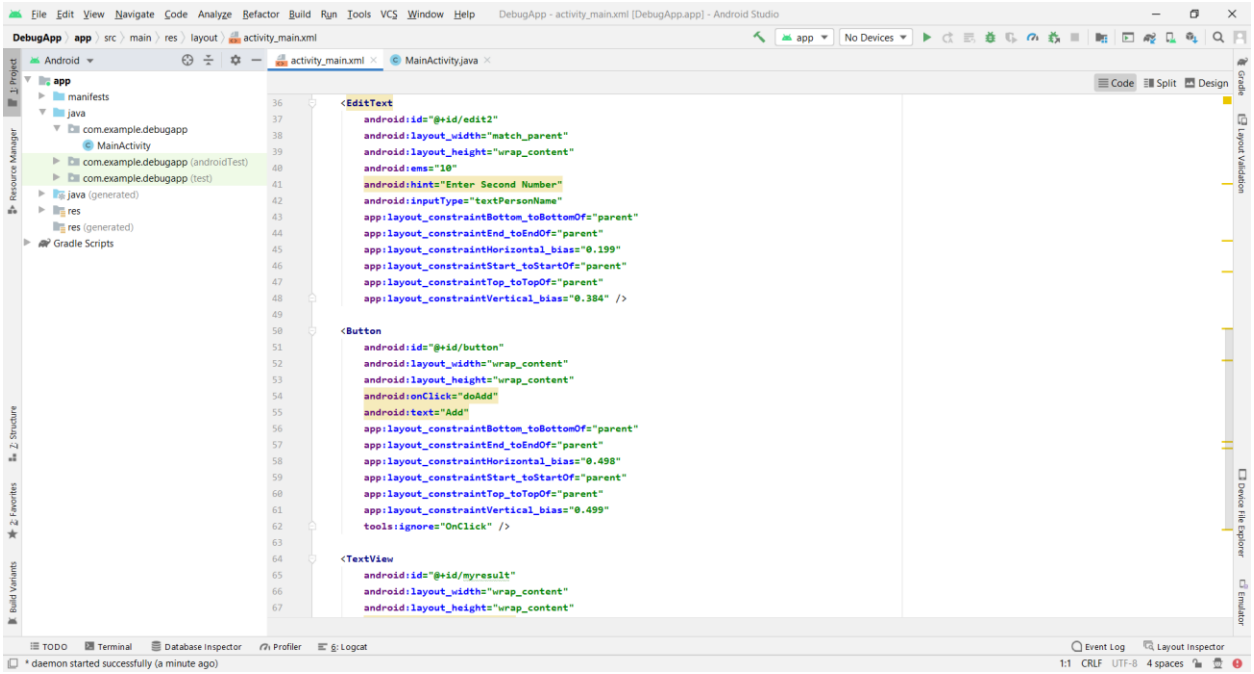

9:19 PM | 2.0KB/s
Services
Services
START SERVICE
STOP SERVICE
Service Stopped

Practical 11:- ANDROID SECURITY AND DEBUGGING

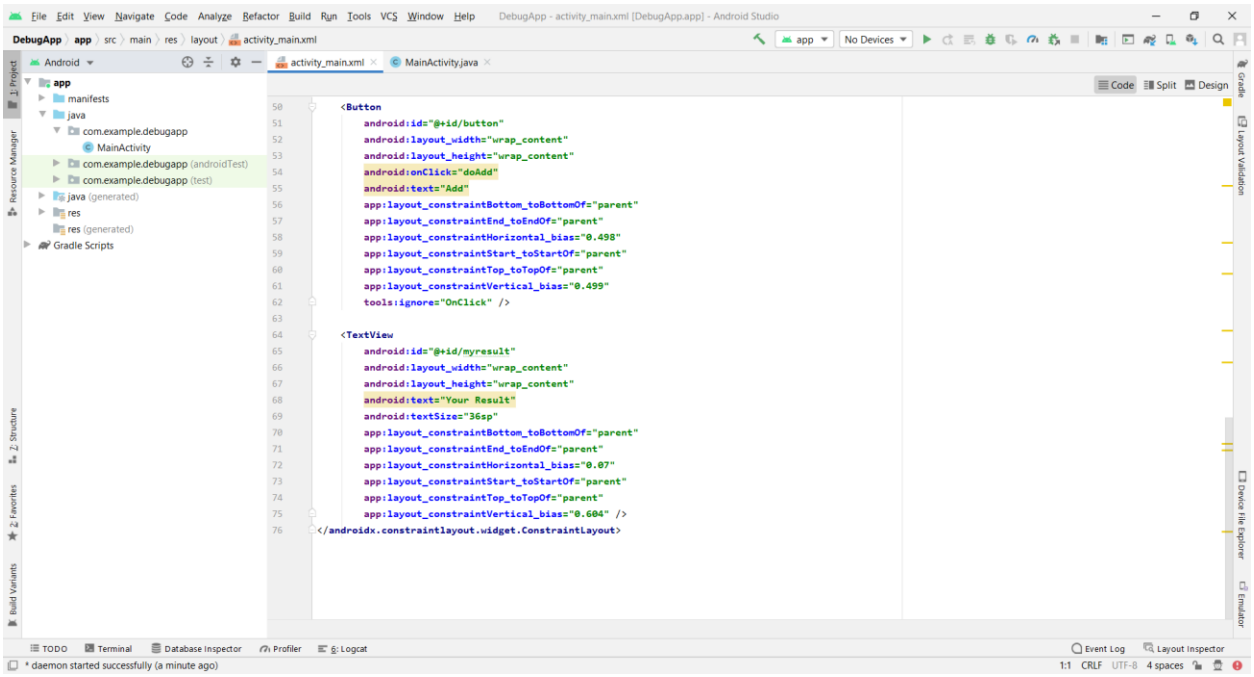
Xml File:-



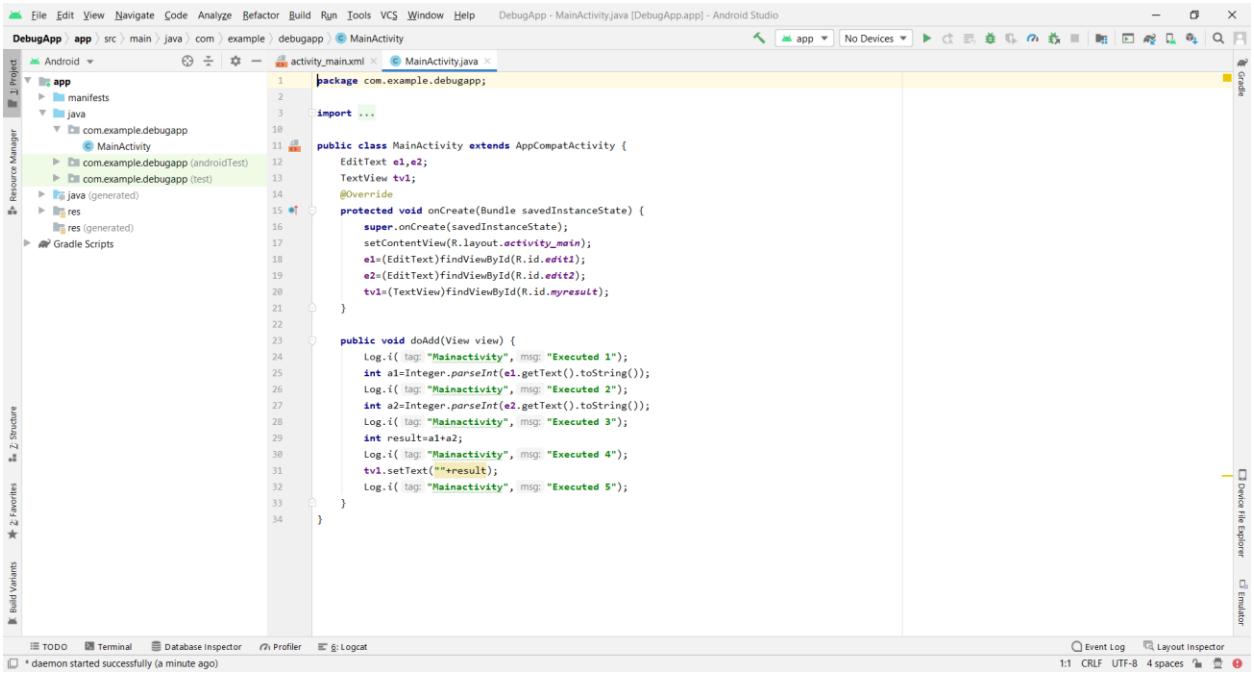
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Debug App"
        android:textSize="30sp"
        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="0.105" />

    <EditText
        android:id="@+id/edit1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter 1 Number"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
```



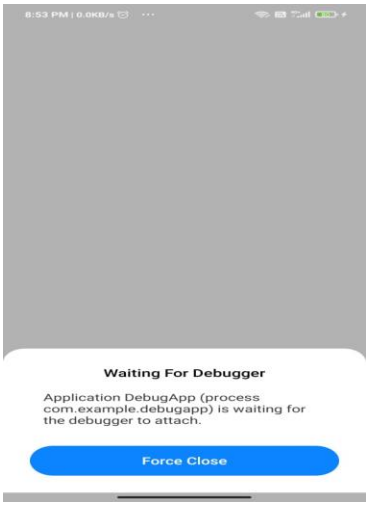
```
    <EditText
        android:id="@+id/edit2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter Second Number"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.199"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.384" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:onClick="doAdd"
        android:text="Add"
        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="0.499"
        tools:ignore="OnClick" />

    <TextView
        android:id="@+id/myresult"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

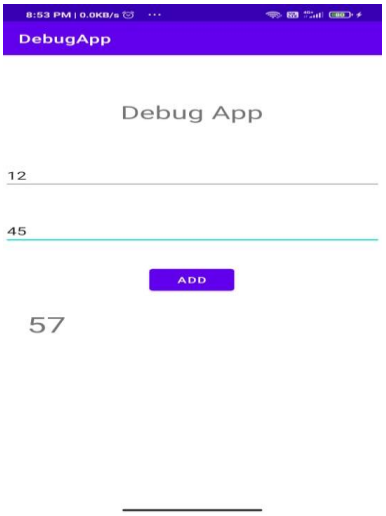

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
DebugApp - activity_main.xml [DebugApp.app] - Android Studio
DebugApp app src main res layout activity_main.xml
app No Devices
Android
activity_main.xml MainActivity.java
Code Split Design
app
manifests
java
com.example.debugapp
MainActivity
com.example.debugapp (androidTest)
com.example.debugapp (test)
java (generated)
res
res (generated)
Gradle Scripts
<Button
android:id="@+id/button"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:onClick="doAdd"
android:text="Add"
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="0.499"
tools:ignore="OnClick" />
<TextView
android:id="@+id/myresult"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Your Result"
android:textSize="36sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.07"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.604" />
</androidx.constraintlayout.widget.ConstraintLayout>
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
* daemon started successfully (a minute ago)
1:1 CRLF UTF-8 4 spaces

Java File:-


File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
DebugApp - MainActivity.java [DebugApp.app] - Android Studio
DebugApp app src main java com example debugapp MainActivity
app No Devices
Android
activity_main.xml MainActivity.java
app
manifests
java
com.example.debugapp
MainActivity
com.example.debugapp (androidTest)
com.example.debugapp (test)
java (generated)
res
res (generated)
Gradle Scripts
package com.example.debugapp;
import ...
public class MainActivity extends AppCompatActivity {
EditText e1,e2;
TextView tv1;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
e1=(EditText)findViewById(R.id.edit1);
e2=(EditText)findViewById(R.id.edit2);
tv1=(TextView)findViewById(R.id.myresult);
}
public void doAdd(View view) {
Log.i(tag: "Mainactivity", msg: "Executed 1");
int a1=Integer.parseInt(e1.getText().toString());
Log.i(tag: "Mainactivity", msg: "Executed 2");
int a2=Integer.parseInt(e2.getText().toString());
Log.i(tag: "Mainactivity", msg: "Executed 3");
int result=a1+a2;
Log.i(tag: "Mainactivity", msg: "Executed 4");
tv1.setText(""+result);
Log.i(tag: "Mainactivity", msg: "Executed 5");
}
}
TODO Terminal Database Inspector Profiler 6: Logcat
Event Log Layout Inspector
* daemon started successfully (a minute ago)
1:1 CRLF UTF-8 4 spaces

OUTPUT:-


Waiting For Debugger
Application DebugApp (process com.example.debugapp) is waiting for the debugger to attach.
Force Close


DebugApp
Debug App
12
45
ADD
57