Practical no 1 HELLO WORLD Mainactivity.java

```
package com.example helloworld;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity
 @Override
 protected void onCreate(Bundle savedInstanceState)
   super onCreate(savedInstanceState);
   setContentView(R.layout.activity_main);
```

mainactivity.xml

ehml version="1.0" encoding="utf-8"?> randroids.constraintlayout.widget.ConstraintLayout.xmlns:android="http://schemas.android.com/apk/res/android" mins.app="http://schemas.android.com/apk/res-auto" emins tools="http://schemas.android.com/tools" android layout width="match parent" android layout height="match_parent" tools contexts" MainActivity">

<TextView

android layout_width="wrap_content" android layout_height="wrap_content" android text="Hello World!" app layout_constraintBottom_toBottomOf="parent" app layout_constraintLeft_toLeftOf="parent" app layout_constraintRight_toRightOfo"parent" app layout_constraintTop_toTopOf="parent" />

Vindroidx.constraintlayout.widget.ConstraintLayout>





Brarat Rai

PRACTICAL NO. 02 RESOURCES IN ANDROID

Color Resource:

colors.xml as follow-> <?xml version="1.0" encoding="utf-8"?> <resources> <color name="colorPrimary">#008577</color> <color name="colorPrimaryDark">#00574B</color> <color name="colorAccent">#D81B60</color> <color name="red">#FF0000</color> <color name="blue">#0000FF</color> <color name="green">#00FF00</color> </resources>

Activity_Main.xml >

<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="match_parent" android:orientation="vertical" android:background="@color/green" tools:context=".MainActivity">

<TextView

android:id="@+id/textView" android:layout_width="wrap_content" android:layout_height="wrap_content" android:textSize="30dp" android:text="This is blue color" android:textColor="@color/blue"/>

<TextView

android:layout_width="wrap_content" android:layout_height="wrap_content" android:text="This is red color!" android:textSize="30dp" android:textColor="@color/red" 1> </LinearLayout>

Dimension Resource:

dimens.xml -> <?xml version="1.0" encoding="utf-8"?> <resources> <dimen name="height">35dp</dimen> <dimen name="width">150dp</dimen>



<dimen name="size">20dp</dimen>
</resources>

Activity_Main.xml→

<?xml version="1.0" encoding="utf-8"?>

<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="match_parent"
android:orientation="vertical"
tools:context=".MainActivity">

<TextView

android:layout_width="wrap_content" android:layout_height="wrap_content" android:text="this is nornal text"/>

<TextView

android:layout_width="@dimen/width"
android:layout_height="@dimen/height"
android:textSize="@dimen/size"
android:text="this is text with user defined dimentions"/>

</LinearLayout>

Drawable Resource:

Activity_Main.xml ->

<?xml version="1.0" encoding="utf-8"?>

<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="match_parent"

android:orientation="vertical"

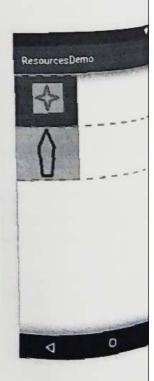
tools:context=".MainActivity">

<lmageView

android:layout_width="wrap_content" android:layout_height="wrap_content" android:src="@drawable/Untitled"/>

<lmageView

android:layout_width="wrap_content" android:layout_height="wrap_content" android:src="@drawable/Untitled1"/> </LinearLayout> ResourcesDemo
hersevalues
this is text with user defined
dimentions



String Resources:

The history and versions of android are interesting to know. The code names of androidranges from A to J currently, such as Aestro, Blender, Cupcake, Donut, Eclair, Froyo, Gingerbread, Honeycomb, Ice Cream Sandwitch, Jelly Bean, KitKat and Lollipop.

Let's understand the android history in a sequence.
Initially, Andy Rubin founded Android Incorporation in Palo Alto,
California, United States in October, 2003. In 17th August 2005,
Google acquired android Incorporation. Since then,
it is in the subsidiary of Google Incorporation.

</string>
</resources>

Activity_Main.xml >>
</xml version="1.0" encoding="utf-8"?>
</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="match_parent"
 android:orientation="vertical"

<TextView

android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:textSize="30dp"
android:text="@string/Heading"
android:textColor="@color/red"/>

tools:context=".MainActivity">

<TextView

android:layout_width="wrap_content" android:layout_height="wrap_content" android:text="@string/History" android:textSize="20dp" android:textColor="@color/blue" />

</LinearLayout>



pin.

```
Style Resource:
To open style.xml file right click app→res→values→style.xml
Style.xml→
<resources>
<style name="MyTheme" parent="Theme.AppCompat.DayNight.DarkActionBar">
<item name="android:textColor">@color/red</item>
<item name="android:background">@color/blue</item>
</style>
</resources>
Manifest.xml→
         To open manifest file app->>manifest-→manifest.xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</p>
  package="com.anu.resourcesdemo">
<application
   android:allowBackup="true"
   android:icon="@mipmap/ic_launcher"
```

<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="true"
android:theme="@style/MyTheme">
<activity android:name=".MainActivity">
<intent-filter>
<action android:name="android.intent.action.MAIN" />
</category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
</activity>
</application>
</manifest>





Practical no. 3

Activity Lifecycle

How to add life cycle

(Cursor should always be before closing of class and after closing of override method)

- Right click -> generate -> override method ->add respective life cycle
 OR
- 2. Press Ctrl+ O to add respected method

```
MainActivity.Java
package com.example activityle;
import androids.appcompat.app.AppCompatActivity;
import android os Bundle,
import android util Log:
public class MainActivity extends AppCompatActivity (
   String tag="lifecycle";
   @Override
   protected void onCreate(Bundle savedInstanceState) (
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_main);
             Log.d(tag. "This is onCreate method");
    @Override
    protected void onStart() {
      super.onStart();
      Log.d(tag, "This is onStart method");
     @Override
    protected void onStop() (
       super.onStop();
       Log d(tag, "This is onStop method");
     @Override
     protected void onDestray() (
       super.onDestroy();
       Log d(tag "This is onDestroy method");
      @Override
      protected void onPause() {
        super onPause().
        Log ditag, "This is on Pause method");
       @Override
       protected void onResume() (
         super onResume();
        Log.d(tag, "This is onResume method");
```

```
@Override
protected void onRestart() {
  super onRestart(};
  Log d(tag, "This is onRestart method");
}
```

- Run the emulator once the Hello World output is shown in logical search bar write "lifecycle".
- Close the app using back button then again open the app in mobile.

Logist

```
### Emulator 17_C1/34_skder_4Pi_0 ** commexample activityte ** vertice ** life: ce **

2023-01-16 18:18:18:389 8.78-8.78 0.1 lifetyple: This is indicate method **

2023-01-16 18:28:28:28:88 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:28 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:27 0.42 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:27 0.42 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:27 0.42 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:28:70 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:38:70 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:38:70 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:38:70 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecime method **

2023-01-16 18:28:28:38:70 8.78-8.78 commemorple activity 0.1 lifetyple: This is indecimal commemorple.
```

Android Emulator - 27 Q. Galplider - Project



Pion

Bharat Rai

Practical no 4

Fragment LifeCycle

How to add fragments. Right click app (Project panel) -> new -> fragment -> blank fragment -> assign name -> uncheck 2 of (Factory method) & 3rd (callback) checkbox -> finish

```
Fragment.java:
```

```
package com.example.activityle;
import android.content.Context;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import android.util.Log;
import android view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
public class BlankFragmentLC40 extends Fragment {
String tag ="lifecycle";
  public BlankFragmentLC40() {
    // Required empty public constructor
                  public View onCreateView(LayoutInflater inflater, ViewGroup container,
                   @Override
                                Bundle savedInstanceState) {
                    // Inflate the layout for this fragment
                    Log.d(tag, "This is onCreate method");
                    return inflater.inflate(R.fayout.fragment_blank_fragment_lc40, container, false);
                  @Override
                  public void onStart() {
                    super.onStart();
                     Log.d(tag, "This is onStart method");
                   @Override
                   public void onResume() {
                     super.onResume();
                     Log d(tag, "This is onResume method");
                   @Override
                  public void onPause() (
                     super.onPause(),
                     Log.d(tag, "This is onPause method"),
                   @Override
                   public void anStop() (
                     super.onStop();
                     Log.d(tag, "This is onStop method");
                   @Override
                   public void onAttach(Context context) (
                     super.onAttach(context);
                     Log oftag, "This is on Attach method");
                   @Override
                   public void onDetach() {
```

super.onDetach();

Log d(tag, "This is onDetach method").

```
@Override
public void onDestroy() {
    super onDestroy();
    Log d(tag, "This is onDestroy method"),
    }
```

Fragment.xml

```
</ml version="1.0" encoding="utf-8">
<frameLayout xmlns:android="http://schemas android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
__android:background="@color/pink"
tools:context=".BlankFragmentLC40">
</-- TODO: Update blank fragment layout -->
<TextView
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:textColor="@color/colorPrimary"
    android:textSize="30dp"
    __android:text="hello_blank_fragment"/>
</frameLayout>
```

Activity.xml

```
< xml version="1.0" encoding="utf-8"?>
<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="match_parent"
  tools:context=".MainActivity">
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Hello World!"
   1>
<fragment
 android:id="@+id/f1"
 class="com.example.activitylc.BlankFragmentLC40"
 android:layout_width="match_parent"
 android:layout_height="match_parent"
 tools:layout="@layout/fragment_blank_fragment_ic40"/>
 </LinearLayout>
```

Logcat

2023-01-16 16:37:49.423 6537-6537/2 I Inferyole: This is independ nethod 2023-01-16 16:37:49.423 6537-6537/2 I Inferyole: This is independ nethod 2023-01-16 16:37:49.429 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.430 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.430 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is independent nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is inference nethod 2023-01-16 16:37:49.431 6537-6537/2 I Inferyole: This is inference nethod 2023-01-16 Inferyole: This is inferen

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ectivities

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1. Constraint Layout:

```
<?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:toofs="http://schemas.android.com/tools"
android:layout_width>"match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
<TextView
  android:id="@+id/no1"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="NO.1"
   app:layout_constraintBottom_toBottomOf="parent"
   app:layout_constraintHorizontal_bias="0.263"
   app:layout_constraintLeft_toLeftOf="parent"
   app:layout_constraintRight_toRightOf="parent"
   app:layout_constraintTop_toTopOf="parent"
   app:layout_constraintVertical_bias="0.248" />
 <EditText
   android:id="@+id/editText"
   android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:text="Name"
    tools:layout_editor_absoluteX="160dp"
    tools:layout_editor_absoluteY="163dp"/>
  <TextView
    android:id="@+id/textVlew"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="NO2"
    tools:layout_editor_absoluteX="100dp"
    tools:layout_editor_absoluteY="246dp" />
  <EditText
    android:id="@+id/editText2"
    android:layout_width="wrap_content"
     android:layout_height="wrap_content"
     android:ems="10"
     android:inputType="textPersonName"
     android:text="Name"
     tools:layout_editor_absoluteX="158dp"
     tools:layout_editor_absoluteY="228dp" />
   <TextView
     android:id="@+id/textView2"
     android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="ANS"
     tools:fayout_editor_absoluteX="104dp"
      tools:layout_editor_absoluteY="320dp" />
```

```
androidad= (a)+id/editlexts
 android:layout width="wrap_content"
 android:layout_height="wrap_content"
 android:ems="10"
 android:inputType="textPersonName"
 android:text="Name"
 tools:layout_editor_absoluteX="161dp"
 tools:layout_editor_absoluteY="309dp" />
<Button
  android:id="@+id/button"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Button"
  tools:layout_editor_absoluteX="111dp"
  tools:layout_editor_absoluteY="449dp" />
<Button
  android:id="@+id/button2"
  android:layout_width="wrap_content"
  android:layout height="wrap_content"
  android:text="Button"
  tools:/ayout_editor_absoluteX="111dp"
   tools:layout_editor_absoluteY="383dp" />
<Button
   android:id="@+id/button3"
   android:layout_width="wrap content"
   android:layout_height="wrap_content"
   android:text="Button"
   tools:layout_editor_absoluteX="226dp"
   tools:layout_editor_absoluteY="383dp" />
 <Button
   android:id="@+id/button4"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:text="Button"
   tools:layout_editor_absoluteX="225dp"
   tools:layout_editor_absoluteY="449dp" />
 < RadioButton
   android:id="@+id/radioButton"
   android:layout_width="wrap content"
   android:layout_height="wrap_content"
   android:text="RadioButton"
   tools:layout editor absoluteX="79dp"
   tools:layout_editor_absoluteY="523dp" />
 < RadioButton
    android:id="@+id/radioButton2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="RadioButton"
    tools:layout_editor_absoluteX="225do"
   tools:layout_editor_absoluteY="523dp" />
 <CheckBox
    android:id="@+id/checkBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="CheckBox"
    tools:layout_editor_absoluteX="94do"
   tools:layout_editor_absoluteY="579dp" />
```

A STATE OF THE PARTY OF THE PAR

```
</LinearLayout>
<Linear Layout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="horizontal">
<TextView
  android:id="@+id/textView2"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="ANS"/>
 <EditText
   android:id="@+id/editText3"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:hint="see ans here" />
 </LinearLayout>
 <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
  <Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
     android:text="Add"
     />
   <Button
     android:id="@+id/button2"
     android:layout_width="wrap_content"
     android:layout_height="wrap_content"
     android:text="Sub"
      />
    <Button
      android:id="@+id/button3"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
                                                                        SUB
                                                                ADD
      android:text="mul"
                                                                      te ale
                                                                Male
      1>
    <Button
                                                                       Sports
      android:id="@+id/button4"
                                                                Muser
      android:layout_width="wrap_content"
       android:layout_height="wrap_content"
                                                                OFF
       android:text="div"
       15
     </LinearLayout>
     <LinearLayout
       android:layout_width="match_parent"
       android:layout_height="wrap_content"
       android:orientation="horizontal">
      < Radio Button
        android:id="@+id/radioButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Male"/>
      < RadioButton
        android:id="@+id/radioButton2"
        android:layout_width="wrap_content"
```

MUL

```
<LneckBox
   android:id="@+id/checkBox2"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="CheckBox"
   tools:layout_editor_absoluteX="226dp"
   tools:layout_editor_absoluteY="579dp" />
 <ToggleButton
    android:id="@+id/toggleButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="ToggleButton"
    tools:layout_editor_absoluteX="152dp"
    tools:layout_editor_absoluteY="642dp" />
2.Linear Layout:
<?xml version="1.0" encoding="utf-8"?>
<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="match_parent"
  android:orientation="vertical"
  tools:context=".MainActivity">
  <LinearLayout
    android:layout_width="match parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
  <TextView
    android:id="@+id/ng1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="NO.1"
 <EditText
    android:id="@+id/editText"
    android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:hint="enter no 1" />
 </LinearLayout>
 <LinearLayout
   android:layout_width="match_parent"
   android:layout_height="wrap_content"
   android:orientation="horizontal">
 <TextView
   android:id="@+id/textView"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="NO2"
   1>
 <EditText
   android:id="@+id/editText2"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:hint="enter no 2"
   />
```

and the

```
android:layout_neight= wrap_content
 android text="Female" />
</LinearLayout>
<LinearLayout
  android:layout width="match parent"
  android:layout_height="wrap_content"
  android:orientation="horizontal">
<CheckBox
  android:id="@+id/checkBox"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Music"
  1>
<CheckBox
   android:id="@+id/checkBox2"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="Sports" />
 </LinearLayout>
 <ToggleButton
    android:id="@+id/toggleButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Ok" />
</LinearLayout>
    Table Layout:
        <?xml version="1.0" encoding="utf-8"?>
        <TableLayout
          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:orientation="vertical"
          tools:context=".MainActivity">
           <TableRow>
             <TextView
             android:id="@+id/no1°
             android:layout_width="wrap_content"
             android:layout_height="wrap_content"
             android:text="NO.1"
             1>
            <EditText
             android.id="@+id/editText"
              android:layout_width="wrap_content"
             android:layout_height="wrap_content"
              android:hint="enter no 1" />
              </TableRow>
            <TableRow>
            <TextView
              android:id="@+id/textView"
              android:layout_width="wrap_content"
              android:layout_height="wrap_content"
              android:text="NO2"
              1>
```

```
< Edit lext
  android:id="@+id/editText2"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:hint="enter no 2"
</TableRow>
<TableRow>
<TextView
  android:id="@+id/textView2"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="ANS"
<EditText
  android:id="@+id/editText3"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:hint="see ans here"
   />
</TableRow>
<TableRow>
<Button
  android:id="@+id/button"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Add"
  />
<Button
  android:id="@+id/button2"
  android:layout_width="wrap content"
  android:layout_height="wrap_content"
  android:text="Sub"
   1>
<Button
  android:id="@+id/button3"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="mul"
 />
<Button
  android:id="@+id/button4"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="div"
  1>
</TableRow>
<TableRow>
< RadioButton
  android:id="@+id/radioButton"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Male" />
< Radio Button
 android:id="@+id/radioButton2"
```

```
android:layout_height="wrap_content"
         android:text="Female"
        </TableRow>
        <TableRow>
        <CheckBox
          android:id="@+id/checkBox"
          android:layout_width="wrap_content"
          android:layout_height="wrap_content"
          android:text="Music"
          1>
        <CheckBox
          android:id="@+id/checkBox2"
          android:layout_width="wrap_content"
           android:layout height="wrap content"
           android:text="Sports"
           1>
         </TableRow>
         <ToggleButton
           android:id="@+id/toggleButton"
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
           android:text="Ok"
            1>
       </>
4.Grid Layout
<?xml version="1.0" encoding="utf-8"?>
<GridLayout
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:rowCount="7"
  android:columnCount="2"
  tools:context=".MainActivity">
   <TextView
    android:id="@+id/no1"
                                                                                    android:layout_width="wrap_content"
                                                               AUD
     android:layout_height="wrap_content"
     android:text="NO.1"
     1>
   <EditText
     android:id="@+id/editText"
     android:layout_width="wrap_content"
     android:layout_height="wrap_content"
     android:hint="enter no 1" />
    <TextView
      android:id="@+id/textView"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="NO2"
      1>
    <EditText
```

```
android:id="@+id/editText2
   android:Jayout_width="wrap_content"
   android:layout_height="wrap_content"
   android:hint="enter no 2"
   1>
 <TextView
   android:id="@+id/textView2"
   android:layout_width="wrap_content"
   android:fayout_height="wrap_content"
   android:text="ANS"
1>
 <EditText
   android:id="@+id/editText3"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:hint="see ans here"
    1>
 <Button
    android:id="@+id/button"
    android:layout width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Add"
    1>
  <Button
    android:id="@+id/button2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Sub"
    />
  <Button
    android:id="@+id/button3"
    android:layout_width="wrap_content"
    android:fayout_height="wrap_content"
    android:text="mul"
   1>
  <Button
    android:id="@+id/button4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="div"
    />
  < Radio Button
    android:id="@+id/radioButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Male"/>
  < RadioButton
    android:id="@+id/radioButton2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Female"
   1>
  <CheckBox
    android:id="@+id/checkBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Music"
```

```
1>
<CheckBox
  android:id="@+id/checkBox2"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="Sports"
   1>
 <ToggleButton
   android:id="@+id/toggleButton"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="Ok"
    1>
                                                                              ADD
</>
Event Handling:
                                                                                        DEV
                                                                              2,48.35
package com.example.uicomponents40;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
                                                                              CHI
import android.widget.*;
public class MainActivity extends AppCompatActivity {
  EditText e1,e2,e3;
   Button b1,b2,b3,b4;
   RadioButton r1,r2;
   CheckBox c1,c2;
   ToggleButton t1;
                                                                          -indiced Emulator 17 C. 3- 30 to
   @Override
   protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      e1=(EditText) findViewByld(R.id.editText);
      e2=(EditText)findViewByld(R.id.editText2);
      e3=(EditText)findViewByld(R.id.editText3);
      b1=(Button) findViewById(R.id.button);
      b2=(Button)findViewByld(R.id.button2);
      b3=(Button)findViewById(R.id.button3);
                                                                                       SUB
                                                                             ADD
      b4=(Button)findViewByld(R.id.button4);
      r1=(RadioButton) findViewByld(R.id.radioButton);
                                                                             MUL
                                                                                        DIV
      r2=(RadioButton) findViewByld(R.id.radioButton2);
      c1=( CheckBox)findViewByld(R.id.checkBox);
       c2=( CheckBox)findViewByld(R.id.checkBox2);
       t1=(ToggleButton)findViewByld(R.id.toggleButton);
     b1.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View view) {
           Toast.makeText(getApplicationContext(),"this is add button", Toast.LENGTH_LONG).show();
        )); X-1
        r1.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {
          @Override
          public void onCheckedChanged(CompoundButton compoundButton, boolean b) {
            Toast.makeText(getApplicationContext(), "Male selected", Toast.LENGTH_LONG).show();
        1);
        r2.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {
          @Override
          public void on Checked Changed (Compound Button compound Button, boolean b) {
```

```
Toast.makeText[getApplicationContext[], FeMale selected , Toast.LENGTH_LUNGT.Show()
    });
    c1.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View view) (
         Toast.makeText(getApplicationContext(), "this is music
checkbox",Toast.LENGTH_LONG).show();
      }
    });
    c2.setOnClickListener(new View.OnClickListener() {
      @Override
      public void on Click (View view) {
         Toast.makeText(getApplicationContext(),"this is sports
checkbox", Toast. LENGTH_LONG). show();
    });
b1.setOnClickListener(new View.OnClickListener() {
  @Override
  public void onClick(View view) {
    int n1,n2,a;
    n1=Integer.parseInt(e1.getText().toString());
    n2=Integer.parseInt(e2.getText().toString());
    a=n1+n2;
    e3.setText("sum="+a);
       } });b2.setOnClickListener(new View.OnClickListener() {
  @Override
  public void onClick(View view) {
    int n1.n2.a:
    n1=Integer.parseInt(e1.getText().toString());
    n2=Integer.parseInt(e2.getText().toString());
                                                                       android Emulator - 1
    a=n1-n2;
    e3.setText("sub= "+a);
  1
});
    }}
                                                                                 2
                                                                                 sub = 0
                                                                         ADD
                                                                                    SUB
                                                                         MUL
                                                                                    DIV
                                                                         Male
                                                                                    Music
                                                                         Female
                                                                         Sports
                                                                                    OFF
```

Rall no: Practical no.8 Activity to Activity Communication

Activity main aml the

```
I mean ayout

I mean ayout

I mean and old "http://schemas.android.com/apk/res/android"

I and a android "http://schemas.android.com/apk/res-auto"

I and a app "http://schemas.android.com/apk/res-auto"

I android layout width "match parent"

I android layout height "match parent"

I tools contest "Main Scholty"

- Hutton

I android layout width "match parent"

I android layout height "wrap content"

I android layout height "wrap content"

I android text "Co To Second Activity"/>

I inearl ayout
```

Main Activity.Java

package com example actioact21; import androids appeompat.app.AppCompatActivity; import android content.Intent; import android.os.Bundle; import android.view.View; import android.widget.Button;

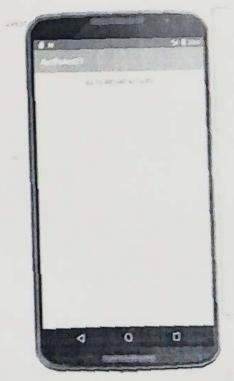
public class MainActivity extends AppCompatActivity (

```
m(Iverride
protected void onCreate(Bundle savedInstanceState) {
    super onCreate(savedInstanceState);
    super onCreate(savedInstanceState);
    setContentView(R layout.activity.main);
    setContentView(R layout.activity.main);
    Button b1=(Button)findViewById(R.id.b/);
    Button b1=(Button)findViewById(R.id.b/);
    b1 setOnClick( istener(new View.OnClickListener());
    into istant istant( istant(
```

Activity main2.xml

- 'ami version "1.0" encoding "out-8" /- androids constraintlayout widget ConstraintLayout
- androids constraintlayout widget ConstraintLayout
- androids android "http://schemas.android.com/apk/res-auto"
- amins app "http://schemas.android.com/tools"
- amins tools "http://schemas.android.com/tools"
- android layout width "match_parent"
- android layout height "match_parent"
- android background "@color/colorPrimaryDark"
- tools context "Main2Activity"

-/androidx.constraintlayout.widget.ConstraintLayout-

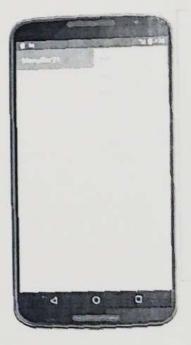


2012

```
Roff no:
Practical no.9
List View with Event Handling
```

```
Activity_main.xml file
2xml version="1.0" encoding="utf-8"?>
<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="match_parent"
  android:orientation="vertical"
  toofs:context=".MainActivity">
  <ListView
     android:id="(a)+id/ly"
     android:fayout_width="match_parent"
     android:layout_height="wrap_content" />
/LinearLayout>
Main Activity, java file
package com.example.listdemo21:
                                                                                    red
import androidx.appcompat.app.AppCompatActivity:
                                                                                    areen
import android.graphics.Color;
 import android.os.Bundle;
 import android, view, View;
 import android.widget.AdapterView;
 import android.widget.ArrayAdapter;
 import android.widget.ListView;
 import android.widget.TextView;
 public class MainActivity extends AppCompatActivity implements
 AdapterView.OnItemClickListener
   List View ly 1;
   String[] c={"red", "green", "blue" [;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity main):
      lv1=(ListView)findViewById(R.id.lv);
      Array Adapter < String > a = new
                                                                                                      0
                                                                                                                 ArrayAdapter<String>(this,android.R.layout.simple list item 1,c);
     Iv1.setAdapter(a);
      lv1.setOnItemClickListener(this);
   @Override
   public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {
      TextView tv=(TextView) view;
      if(i==0){
        tv.setBackgroundColor(Color.RED);
      if(i==1){
        tv.setBackgroundColor(Color.GREEN);
        tv.setBackgroundColor(Color.BLUE);
```

```
Roll no:
Practicle no.10
MenuBar
Menu file
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android"
  <item android:id="(a)+id r"
    android:title="Red"/>
  <item android:id="@+id/g"
    android:title="Green"/>
  <item android:id="(a)+id/b"
     android:title="Blue"/>
</menu>
In Xml file under ConstraintLayout
android:layout_width="match_parent"
android:layout_height="match_parent"
 Java file
 package com.example.menubar21;
 import androidx.annotation.NonNull;
 import androidx.appcompat.app.AppCompatActivity;
 import android.content.Intent;
 import android.graphics.Color;
 import android.os.Bundle;
 import android, view. Menu;
 import android.view.MenuInflater;
 import android.view.Menultem;
 import android.widget.TextView;
 public class MainActivity extends AppCompatActivity {
    protected void onCreate(Bundle savedInstanceState) {
    @Override
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
      MenuInflater mi=getMenuInflater();
       mi.inflate(R.menu.mymenu,menu);
       return true;
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
    @Override
       TextView tv=(TextView)findViewByld(R.id.tv);
       switch (item.getItemId()){
         case R.id.r:
            tv.setBackgroundColor(Color.RED);
            return true;
          case R.id.g:
            tv.setBackgroundColor(Color.GREEN);
            return true;
          case R.id.b:
            tv.setBackgroundColor(Color.BLUE);
            //Intent i=new Intent(getApplicationContext(),Main2Activity.class);
             EstartActivity(i):
             return true:
        return super.onOptionsItemSelected(item);
```



Br 12

Practical no.11 Activity to Fragment Communication Activity main.xml file

'xml version="1.0" encoding="uff-8"? <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="match_parent" android:orientation="vertical" tools:context=".MainActivity"> <Button android:id="/ar+id/btnred" android:layout_width="match_parent" android:layout_height="wrap_content" android:onClick="changefragment" android:text="Call Red Fragment"/> <Button android:id="@+id/btngreen" android:layout_width="match_parent" android:layout_height="wrap_content" android:onClick="changefragment" android:text="Call Green Fragment"/>

<fragment android:name="com.example.atof21.RedFragment" android:id="@)+id/fragment1" android:layout_width="match_parent" android:layout_height="match_parent"/> </LinearLayout>

Fragment red.xml file

<?xml version="1.0" encoding="utf-8"?> xmlns:android="http://schemas.android.com/apk/res/android" <FrameLayout xmlns:tools="http://schemas.android.com/tools" android:layout_width="match_parent" android:layout_height="match_parent" android:background="@color/colorPrimaryDark" tools:context=".RedFragment"> <!-- TODO: Update blank fragment layout --> android:layout_width="match_parent" <TextView android:layout_height="match_parent" android:text="This is Red Fragment" />

Fragment green.xml file

</FrameLayout>

<?xml version="1.0" encoding="utf-8"?> <FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"</p> xmtns:tools="http://schemas.android.com/tools" android:layout_width="match_parent" android:layout_height="match_parent" android:background="@color/colorPrimary" tools:context=".GreenFragment">

!-- TODO Update blank fragment layout --<Text View android:layout_width="match_parent" android:layout_height="match_parent" android:textSize="30dp" android:text="This is Green Fragment" />

```
</Framel.ayout>
MainActivitty.java file
package com.example.atof21:
import androids.appcompat.app.AppCompatActivity:
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;
 import android.os.Bundle;
 import android.view.View;
 import android.widget.Button;
 public class MainActivity extends AppCompatActivity !
    Button btnred;
    Button bingreen;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       setContentView(R.layout.activity main):
     public void changefragment(View view) {
        Fragment fg;
        if(view==findViewByld(R.id.binred)){
           fg=new RedFragment();
           FragmentManager fm = getSupportFragmentManager();
           FragmentTransaction ft = fm.beginTransaction();
           ft.replace(R.id.fragment1.fg);
            ft.commit();
         if(view==findViewById(R.id.bingreen));
            fg=new GreenFragment();
            FragmentManager fm = getSupportFragmentManager();
            FragmentTransaction ft = fm.beginTransaction();
            ft.replace(R.id.fragment1,fg);
            ft.commit();
```



Steps to add fragments:

- · App-> new -> fragment -> blank fragment
- Uncheck factory methods -> interface caliback->language- java->target-main.
- Create one more fragment using same steps

```
Activity_main.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
 xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:toofs="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical"
  tools:context=".MainActivity">
  <FrameLayout
    android:id="@+id/fragmentcontainer"
    android:layout_width="370dp"
    android:layout_height="490dp"
    tools:layout_editor_absoluteX="8dp"
    tools:layout_editor_absoluteY="8dp" />
</LinearLayout>
```

Fragment1.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical"
  tools:context=".Fragmen1">
  <Button
    android:id="@+id/btnsend"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Send Message" />
  <EditText
    android:id="@+id/txtmsg"
    android:layout_width="wrap_content"
    android:fayout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:hint="enter your message here" />
</LinearLayout>
```

Practical no.13 **Database Communication**

Activity main.xml file

2xml version="1.0" encoding="utf-8".2 Linearl ayout

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:fayout_height="match_parent" android:orientation="vertical" tools:context=",MainActivity">

<TextView android:id="/a +id/textView" android:layout_width="match_parent" android:layout_height="wrap_content" android:text="Username" />

<EditText android:id="@+id/username" android:layout_width="match_parent" android:fayout_height="wrap_content" android:ems="10" android:inputType="textPersonName" android:hint="Enter your Name here" />

<TextView android:id="a+id/textView2" android:layout_width="match_parent" android:layout_height="wrap_content" android:text="Password" />

<EditText android:id="@+id/password" android:layout_width="match_parent" android:layout_height="wrap_content" android:ems="10" android:input Type="textPersonName" android:hint="Enter your Password here" />

<Button android:id="u+id/login" android:layout_width="match_parent" android;layout_height="wrap_content" android:text="Login" > android: on Click

< Button android:id="/a+id/drop" android:layout_width="match_parent" android:fayout_height="wrap_content" android:text="Drop" />

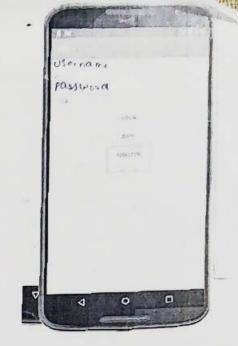
<Button android:id="@+id/register" android:layout_width="match_parent" android:layout_height="wrap_content" android:text="Register" /> </LinearLayout>

Mainactivity java→

package com example.db21;

import androids.appcompat.app.AppCompatActivity;

import android content.Context; import android database.*; import android.database.sqlite.*: import android os Bundle: import android view. View. import android, widget. ";





```
class MyDB extends SQLiteOpenHelper{ <
    MyDB(Context c)[
       super(c,"logindly".null.1);
     a Override
    public void onCreate(SQLiteDatabase db)[
       String str="create table login(ascename text.password text)";
       db.execSQL(str);
     a Override
     public void on Upgrade(SQLiteDatabase db.int oldVersion,int newVersion)
       String dr="drop table if exists login";
       db.execSQL(dr);
       onCreate(dh);
 public class Main Activity extends AppCompatActivity |
     EditText eusername epassword:
     Button blogin,bdrop,bregister;
     SQLiteDatabase db;
   a Override
   protected void onCreate(Bundle savedInstanceState) }
      super.onCreate(savedInstanceState);
      serContentView(R.layout.activity main);
      eusername (1 dit1ext)findViewByld(R.id.username);
      epassword=(1.ditText)findViewByld(R.id.password);
      blogin=(Button)findViewById(R.id.login);
      bdrop=(Button)findViewById(R.id.drop);
      bregister=(Button)findViewByld(R.id.register);
      mdb=new MyDB(this);
    public void login_fun(View v){
      Steing un=String.valueOffeusername.getText());
      String pass=String.valueOf(epassword.getText()):
      db=mdb.getReadable()atabase():
      String q="select * from login where username="+un+"and password="+pass+"":
      try !
         Cursor c=db.rawQuery(q.null):
           Toast.makeText(this, "Username or Password wrong or User doesn't exists", Toast.LEVGTH_LOVG), show();
         if(c.getCount()==0);
           while(c.moveToNext());
             String uname=c.getString(0);
             Toast.makeTexrchis, "Username: "+ uname +"'nPassword:" + passw_Toast.LENGTH_LONG).show():
             if(un.content):quals(uname)&&pass.contentl.quals(passw));
                Toast.makeTexrethis, "Welcome User:" + un, Toast.LENGTH_LONG); show();
                c.close():
      catch(SQLiteException sqle) [
         sqle.printStack Trace():
    public void register_fun(View v);
      String un=String.valueOf(eusernance.getText()):
      String pass=String.valueOftepassword.getText()f:
      db=mdb.getWritableDatabase();
      String q="insent into login values(""+un+"",""+pass+"")";
      Toast.makeText(getApplicationContext(), "User Registered", Toast.LENGTH SHORT).show();
   public void drop_fun(View v)
      db=mdb.getWritableDatabase();
      Toast.makeText(getApplicationContext), "All User Deleted", Toast ITAGTH SHORT) shower.
      mdb.onl/pgrade(db.1.2):
```