

MAD Practicals 4 to 16

Khan Shahnawaz 1816080045

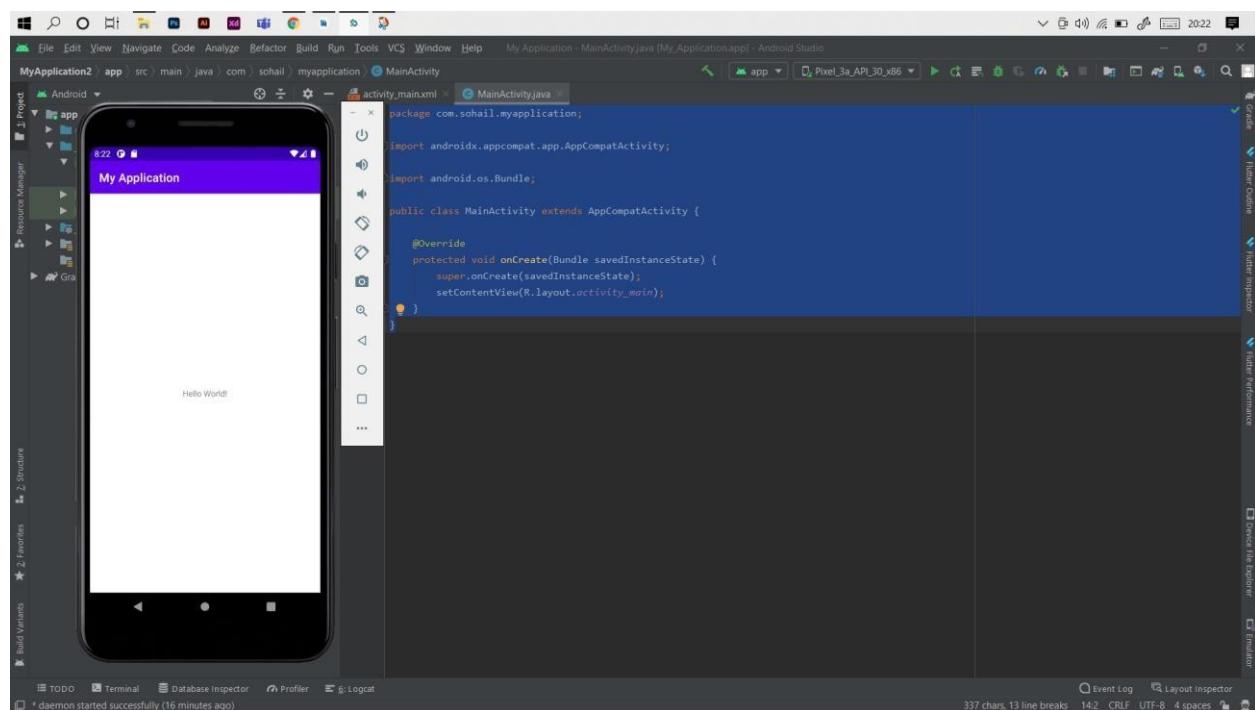
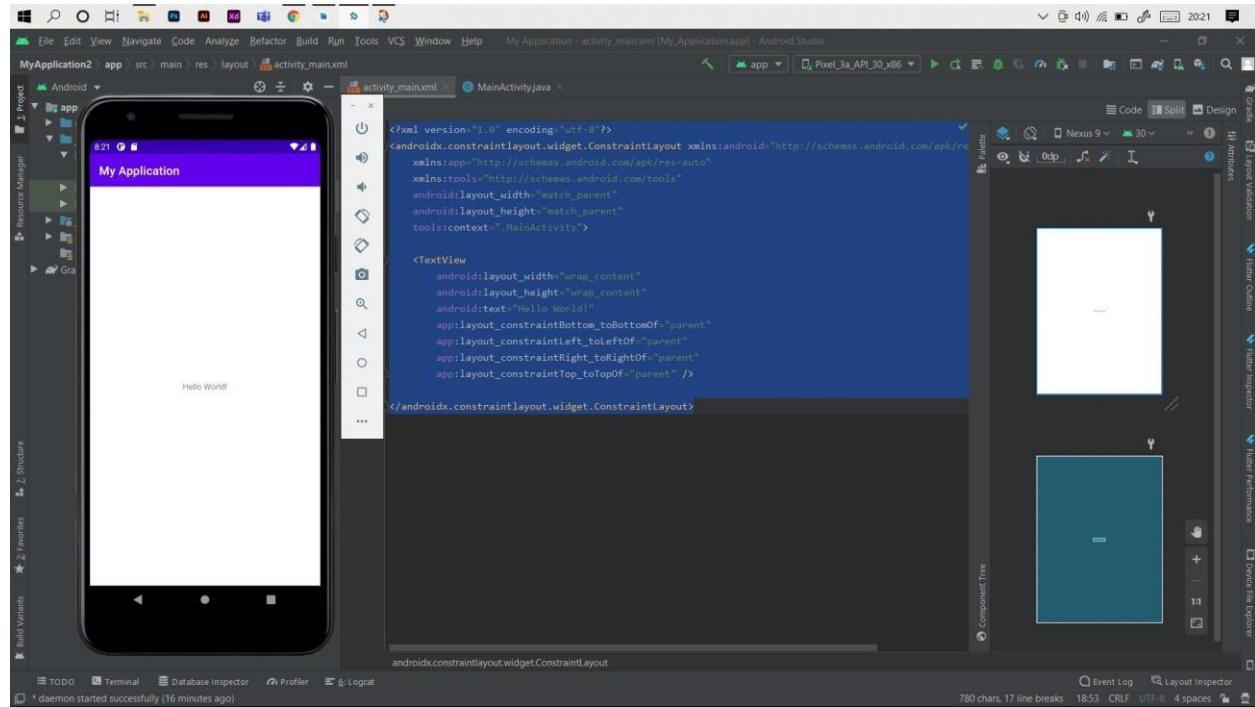
Practical No. 4: Develop a program to display Hello World on screen activity_main.xml:

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

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); }
}
```

Output :



MAD Practicals
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Practical No 5: Develop a program to implement linear layout and absolute layout . 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"
```

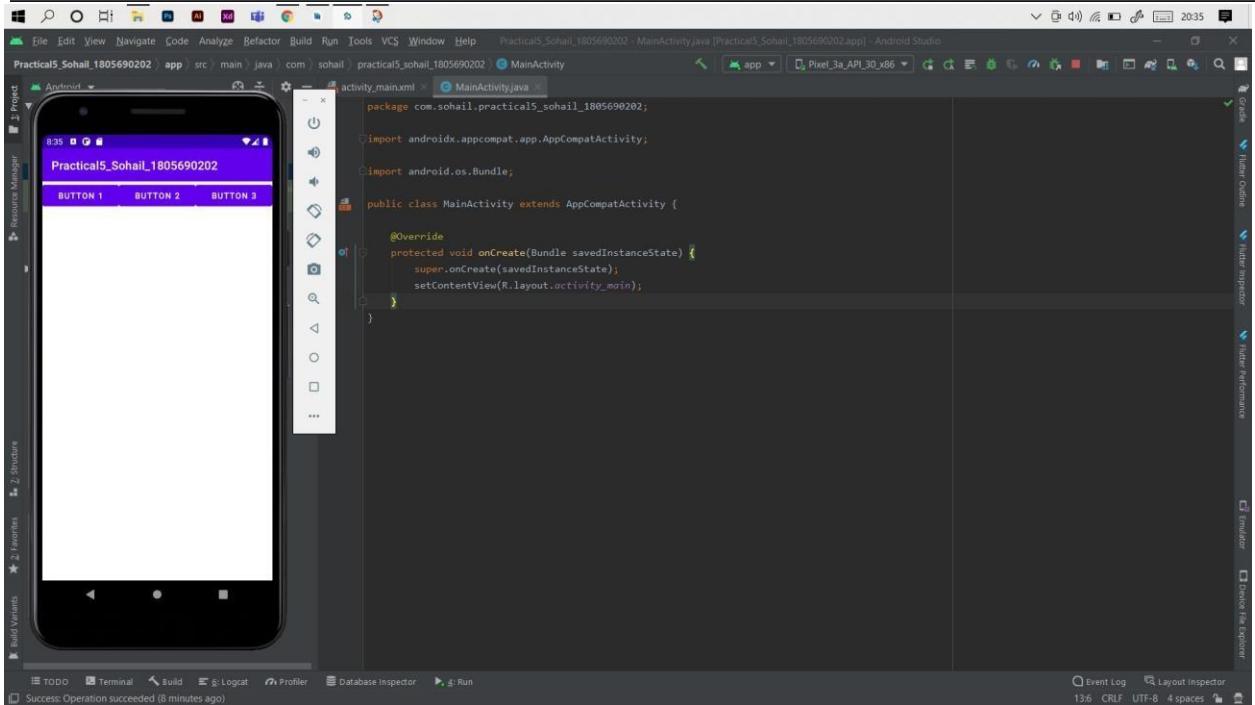
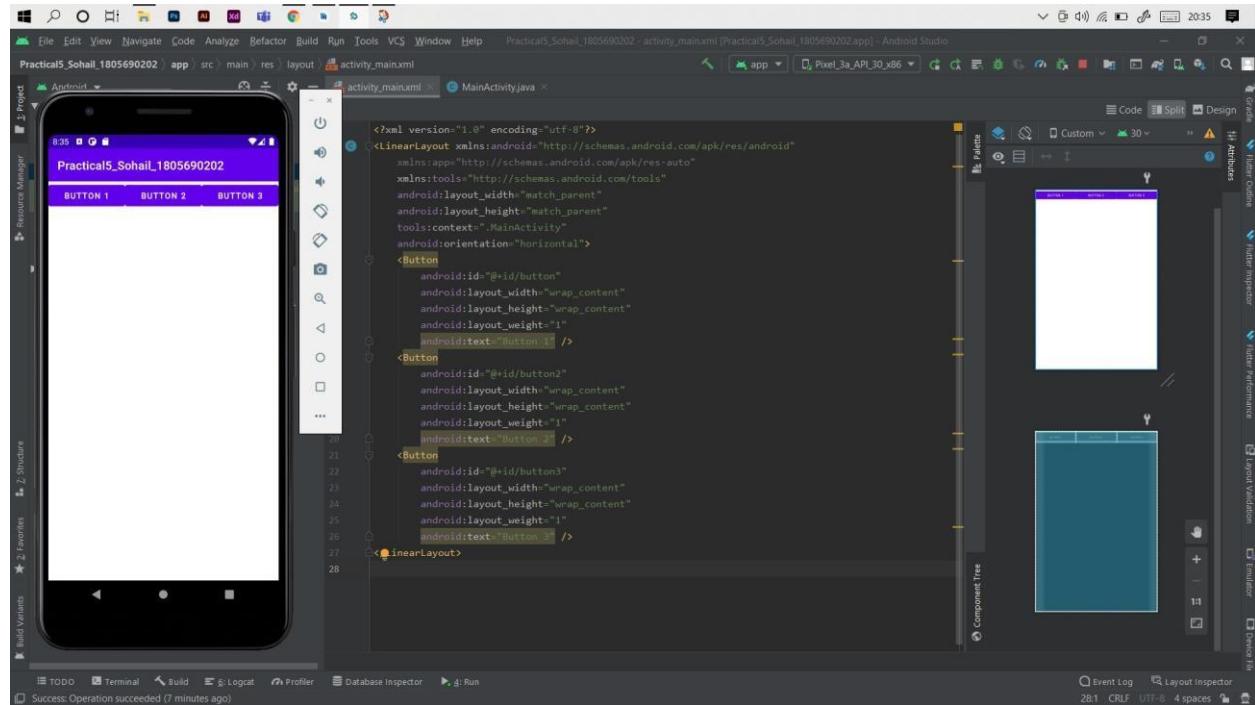
```
    android:layout_width="match_parent"
    android:layout_height="match_parent" tools:context=".MainActivity"
    android:orientation="horizontal">
        <Button android:id="@+id/button"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Button 1" />
        <Button android:id="@+id/button2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Button 2" />
        <Button android:id="@+id/button3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Button 3" />
    
```

MainActivity.java:

```
package com.sohail.practical5_sohail_1805690202; 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);
    }
}
```

Output :



LinearLayout (Vertical):

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="wrap_content" tools:context=".MainActivity"
    android:orientation="vertical">

    <Button android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Button 1" />

    <Button android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Button 2" />

    <Button android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Button 3" />

</LinearLayout>
```

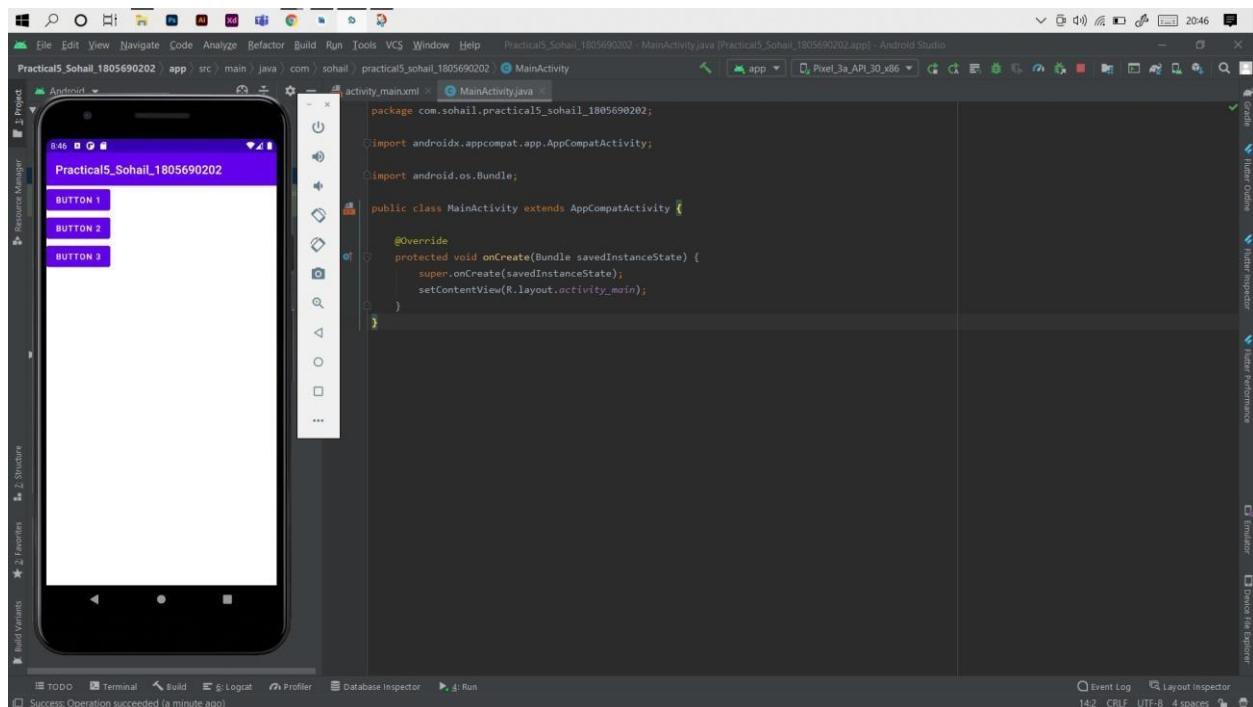
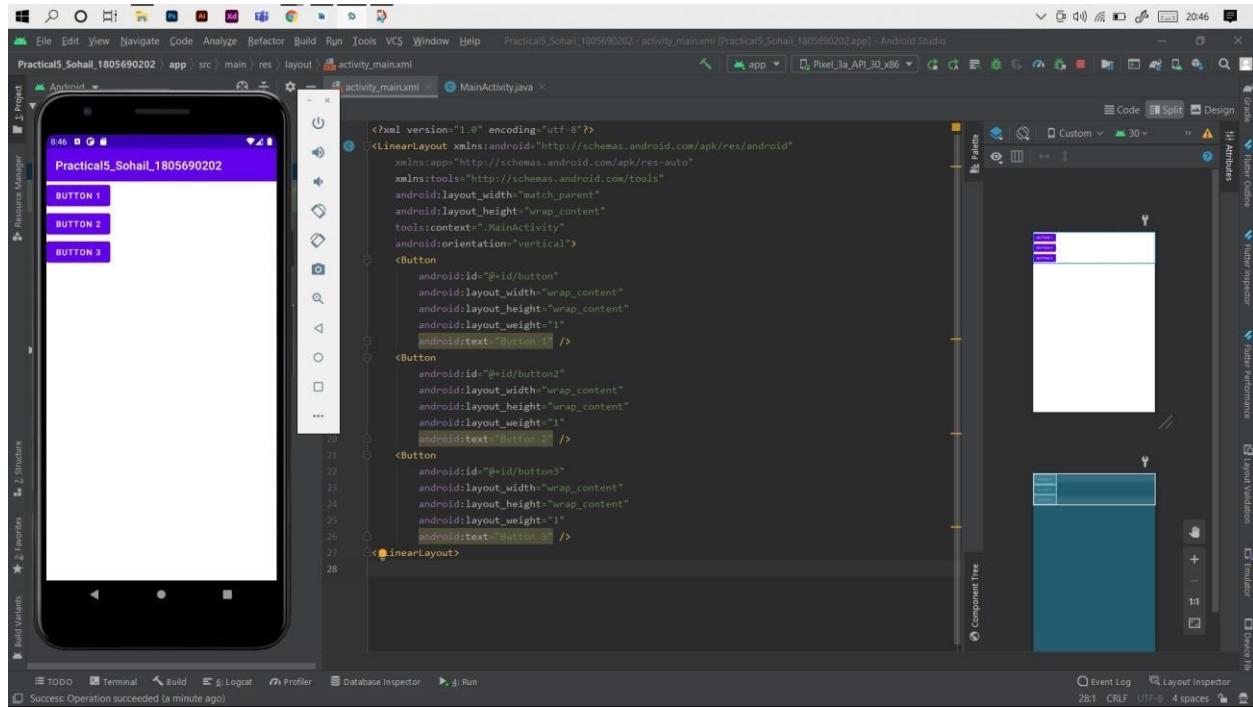
```
MainActivity.java:
```

```
package com.sohail.practical5_sohail_1805690202; 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);
}
}

Output :
```



MAD Practicals
Khan Shahnawaz 1816080045

Practical No. 6: Develop a program to implement frame layout, table layout and relative layout

FrameLayout

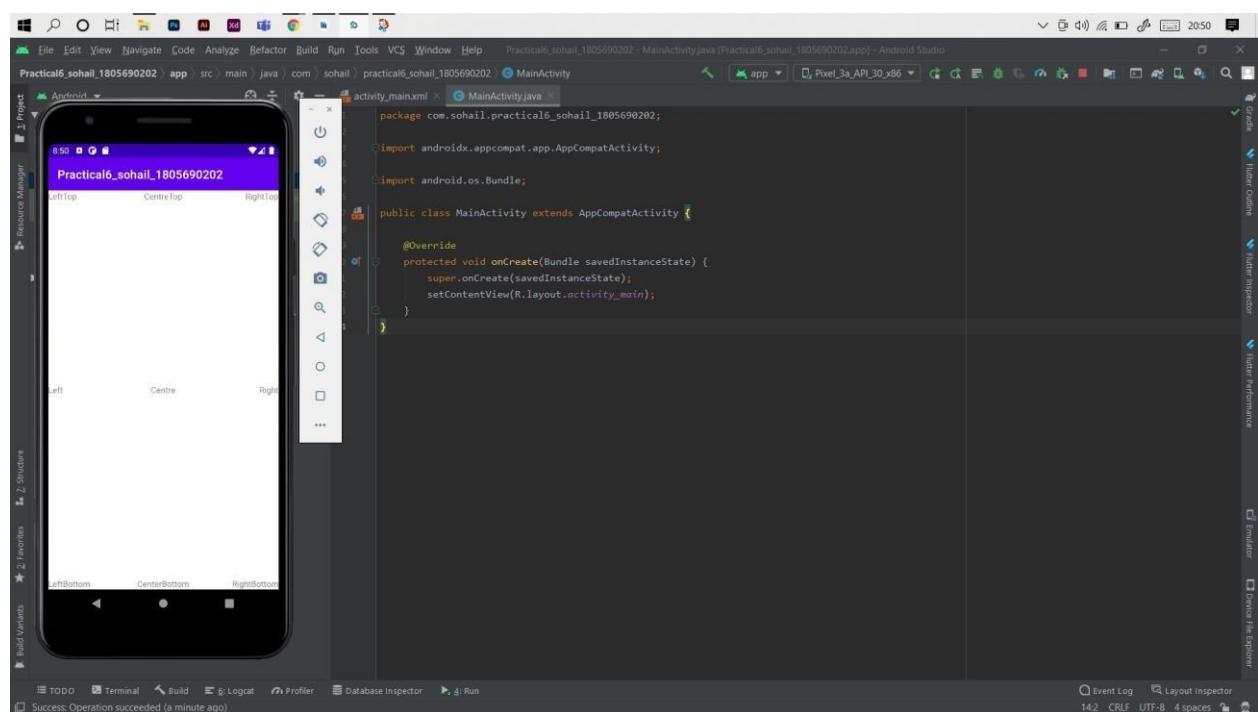
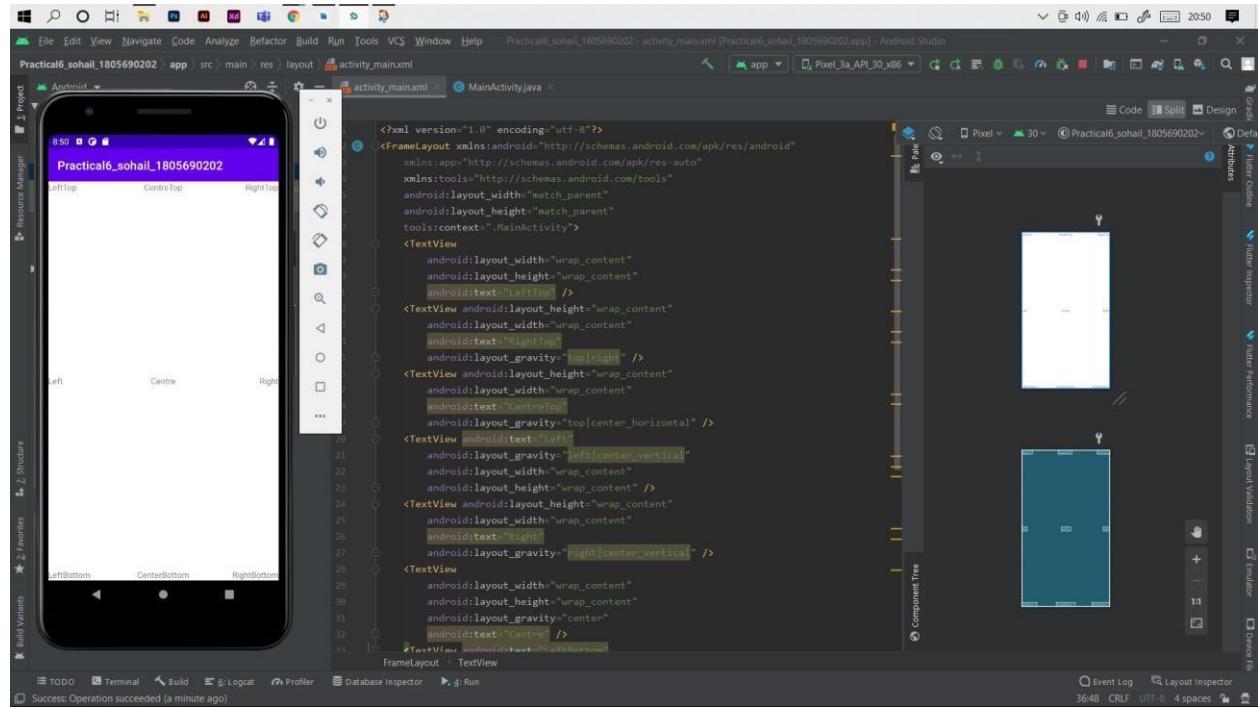
Activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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="LeftTop" />
    <TextView android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:text="RightTop"
        android:layout_gravity="top|right" /> <TextView
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:text="CentreTop"
        android:layout_gravity="top|center_horizontal" />
    <TextView android:text="Left"
        android:layout_gravity="left|center_vertical"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" /> <TextView
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:text="Right"
        android:layout_gravity="right|center_vertical" />
    <TextView android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Centre" />
```

```
<TextView android:text="LeftBottom"
    android:layout_gravity="left|bottom"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />
<TextView android:layout_height="wrap_content"
    android:layout_width="wrap_content"
    android:text="RightBottom"
    android:layout_gravity="right|bottom" /><TextView
    android:layout_height="wrap_content"
    android:layout_width="wrap_content"
    android:text="CenterBottom"
    android:layout_gravity="center|bottom" />
</FrameLayout> MainActivity.java:
```

```
package com.sohail.practical5_sohail_1805690202; 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);
}
}
```

Output:



TableLayout:

Activity_main.xml:

```
<?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:layout_marginTop="100dp"
        android:paddingLeft="10dp" android:paddingRight="10dp"
        tools:context=".MainActivity">
<TableRow
    android:background="@android:color/darker_gray"
    android:padding="5dp"> <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1" android:text="Sr.
        No." />
<TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Name" /> <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Enrollment No." />
</TableRow>
<TableRow android:padding="5dp">
<TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="1" /> <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Sohail Shaikh" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:text="1805690202" />
</TableRow>
<TableRow android:padding="5dp">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="2" /> <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Qais Sahib" />
    <TextView android:layout_width="wrap_content" android:layout_height="wrap_content"
        android:layout_weight="1" android:text="1805690213" /> </TableRow>
<TableRow android:padding="5dp">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="3" /> <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Sajiya Shaikh" />
    <TextView android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```
        android:layout_weight="1"

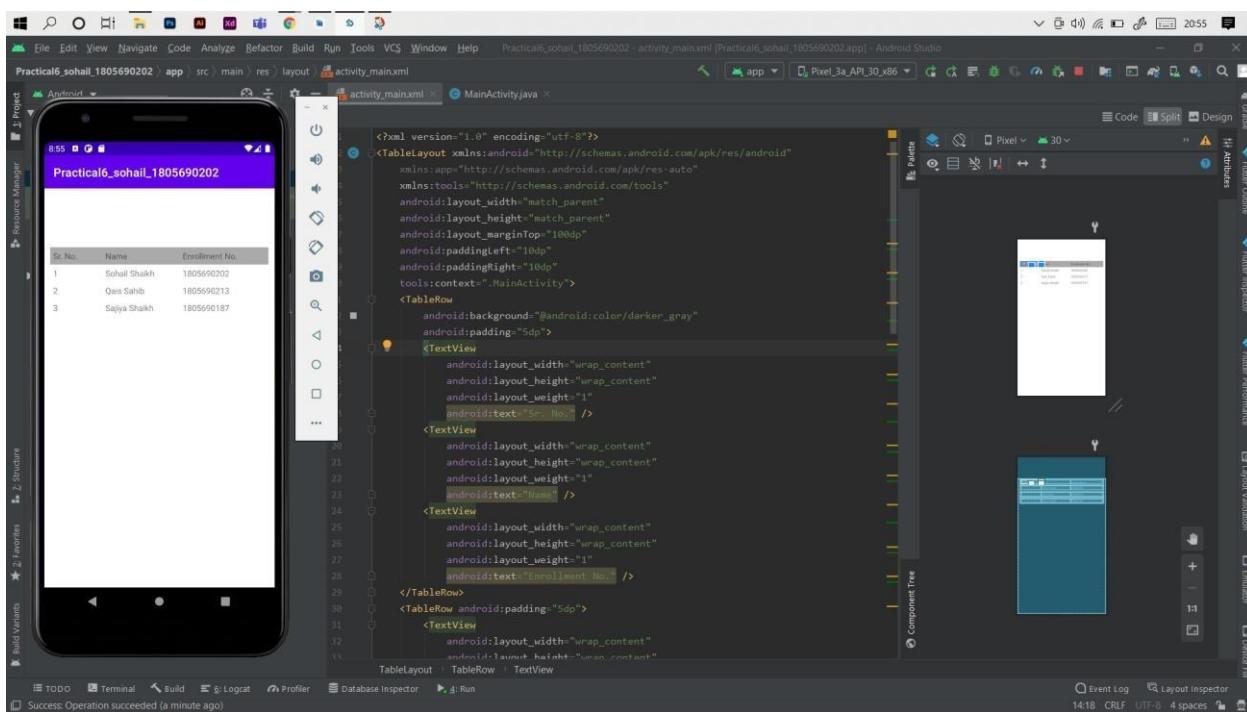
        android:text="1805690187" />

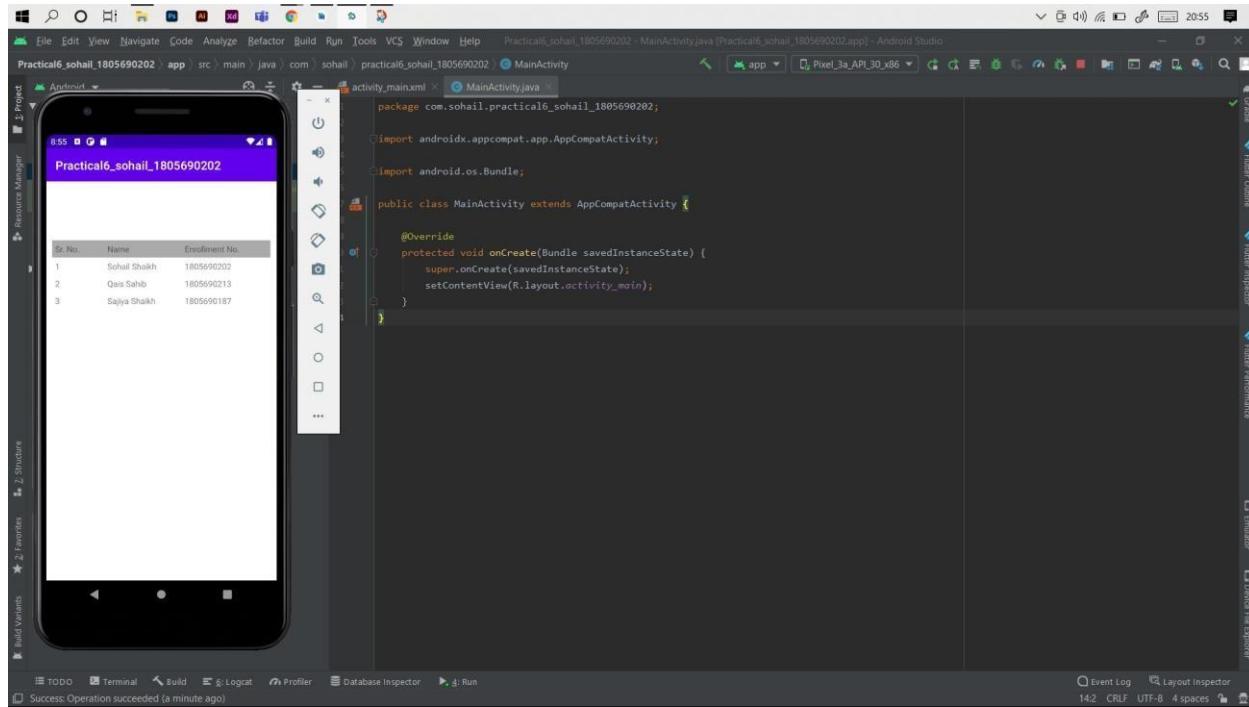
    </TableRow>

</TableLayout>
```

```
MainActivity.java package
com.sohail.practical6_sohail_1805690202; 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);
}
}
```

Output :





RelativeLayout:

Activity_main.xml

```
<?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"
    tools:context=".MainActivity">

    <TextView android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Relative Layout"
        android:layout_centerHorizontal="true" />

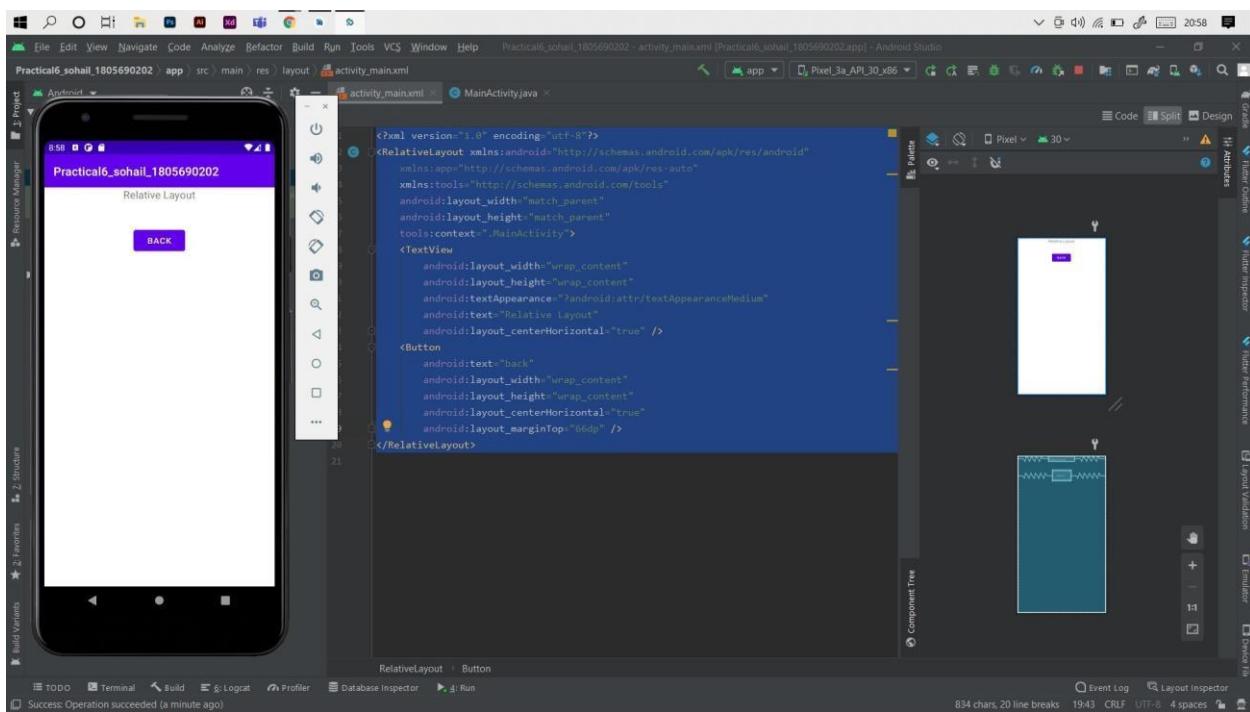
    <Button
        android:text="back" android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="66dp" />

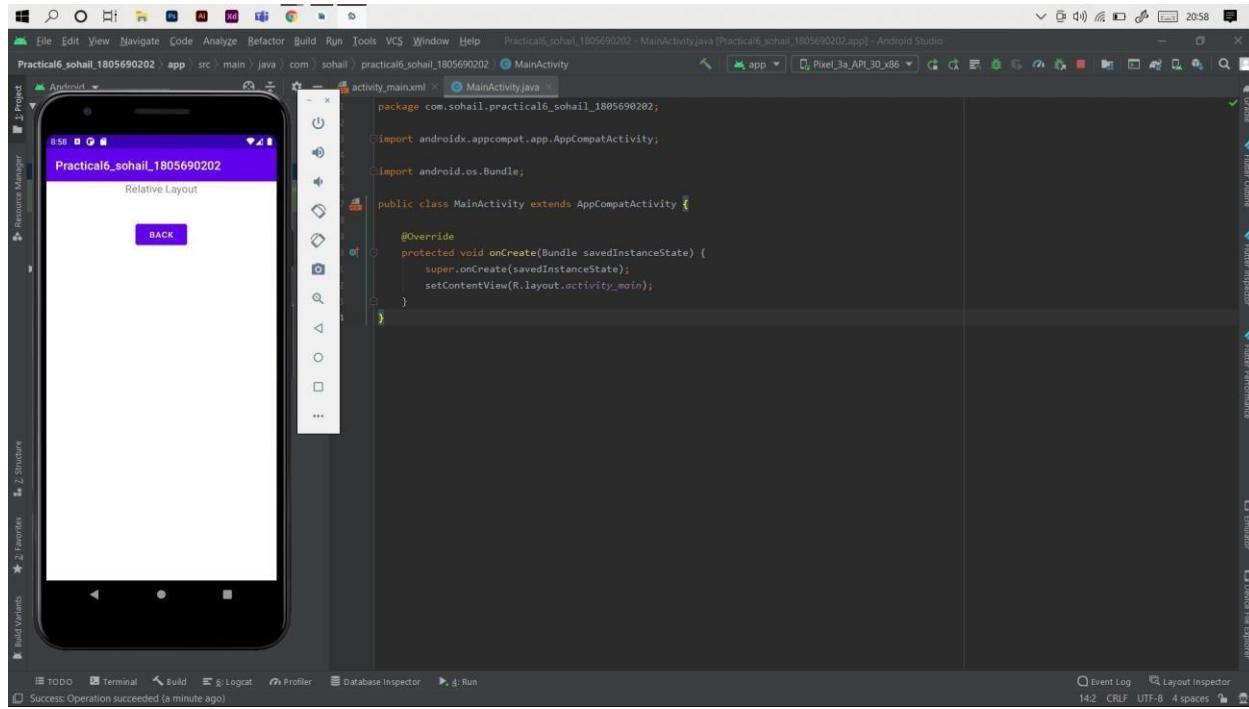
</RelativeLayout>
```

MainActivity.java package

```
com.sohail.practical6_sohail_1805690202; 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);  
  
    }  
}
```

Output :





MAD Practicals

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Practical No. 7

a) Write a program to accept username and password from the end user using Text View and Edit Text

```
activity_main.xml <RelativeLayout 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:layout_margin="50dp" >
```

```
        <TextView android:id="@+id/textView1"
```

```
            android:layout_width="wrap_content"
```

```
            android:layout_height="wrap_content"
```

```
            android:layout_alignParentLeft="true"
```

```
            android:layout_marginTop="23dp"
```

```
            android:text="Username: " /> <EditText
```

```
                android:id="@+id/editText1"
```

```
                android:layout_width="wrap_content"
```

```
                android:layout_height="wrap_content"
```

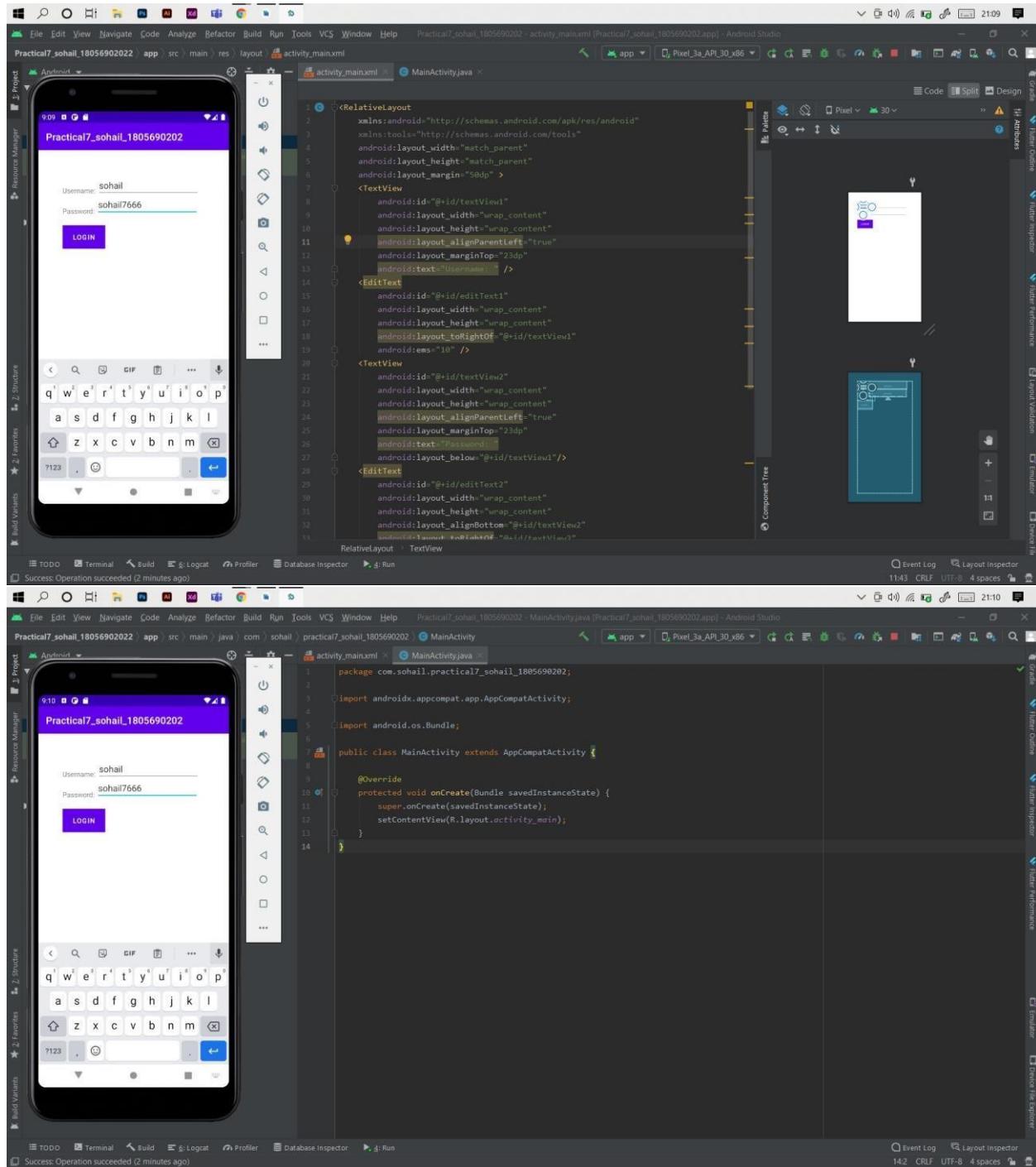
```
                android:layout_toRightOf="@+id/textVi
```

```
ew1" android:ems="10" /> <TextView
```

```
                android:id="@+id/textView2"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_marginTop="23dp"
    android:text="Password: "
    android:layout_below="@+id/textView1
    "/>
<EditText android:id="@+id/editText2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBottom="@+id/textView2"
    android:layout_toRightOf="@+id/textView2"
    android:ems="10" /> <Button
    android:id="@+id/button1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/textView2"
    android:layout_marginTop="20dp"
    android:background="#0099FF"
    android:text="Login"
    android:textColor="#FFFFFF" />
</RelativeLayout> MainActivity.java
package com.sohail.practical7_sohail_1805690202; 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);
}
}
```

Output :



b) Write a program to accept and display personal information of the student 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:layout_margin="50dp"
    android:orientation="vertical" tools:context=".MainActivity">
<LinearLayout android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"> <TextView
        android:layout_width="60dp"
        android:layout_height="wrap_content"
        android:text="Name : " /> <EditText
        android:id="@+id/editText1"
        android:layout_width="205dp"
        android:layout_height="wrap_content" />
</LinearLayout> <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
<TextView android:layout_width="60dp"
        android:layout_height="wrap_content"
        android:text="DOB : " /> <EditText
        android:id="@+id/editText2"
        android:layout_width="205dp"
        android:layout_height="wrap_content" />
</LinearLayout> <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
<TextView
        android:layout_width="60dp"
        android:layout_height="wrap_content"
        android:text="Email Id : " /> <EditText
```

```
    android:id="@+id/editText3"
    android:layout_width="205dp"
    android:layout_height="wrap_content"
/>
</LinearLayout> <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView android:layout_width="60dp"
        android:layout_height="wrap_content"
        android:text="Ph No. : "/> <EditText
        android:id="@+id/editText4"
        android:layout_width="205dp"
        android:layout_height="wrap_content" />
</LinearLayout> <Button
    android:id="@+id/button"
    android:layout_marginTop="15dp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Submit" /> <TextView
    android:id="@+id/textView5"
    android:layout_marginTop="40dp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
/>

<TextView android:id="@+id/textView6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />
```

```
<TextView android:id="@+id/textView7"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />
<TextView android:id="@+id/textView8"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />
</LinearLayout> MainActivity.java

package com.sohail.practical7_sohail_1805690202; import
androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import android.view.View;
import android.widget.Button; import android.widget.EditText; import android.widget.TextView; public
class MainActivity extends AppCompatActivity {

    TextView t5,t6,t7,t8;
    EditText e1,e2,e3,e4;

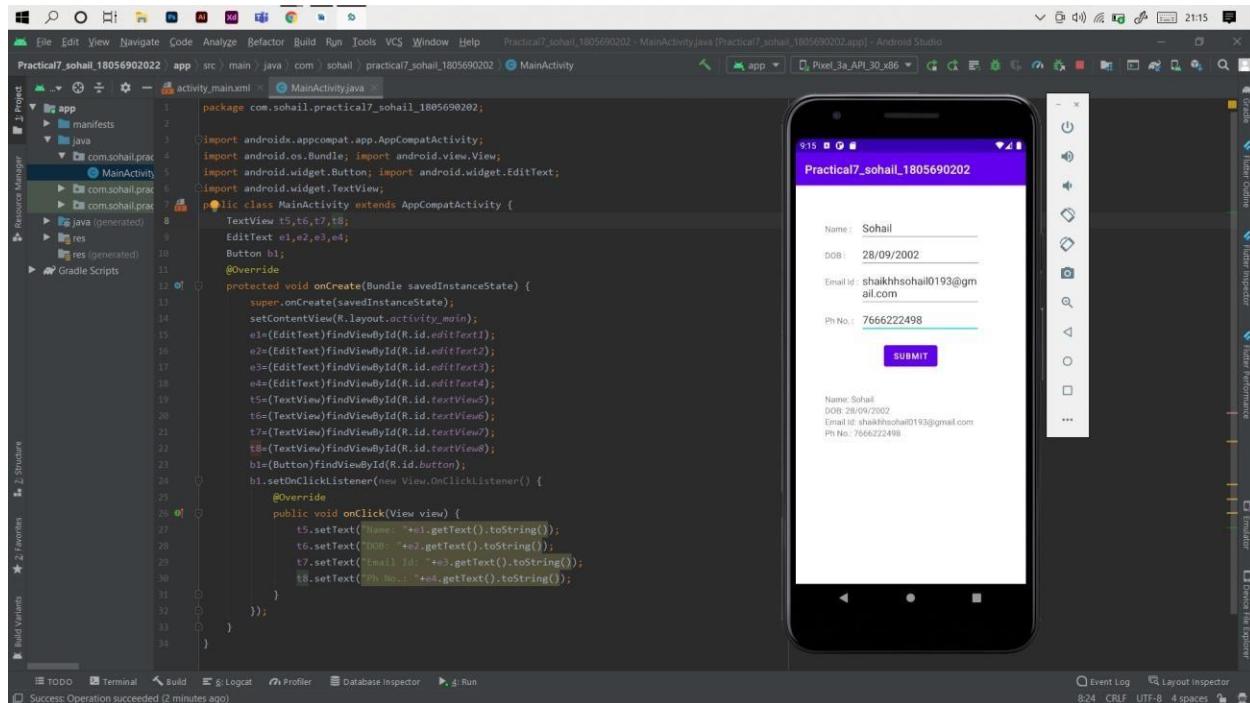
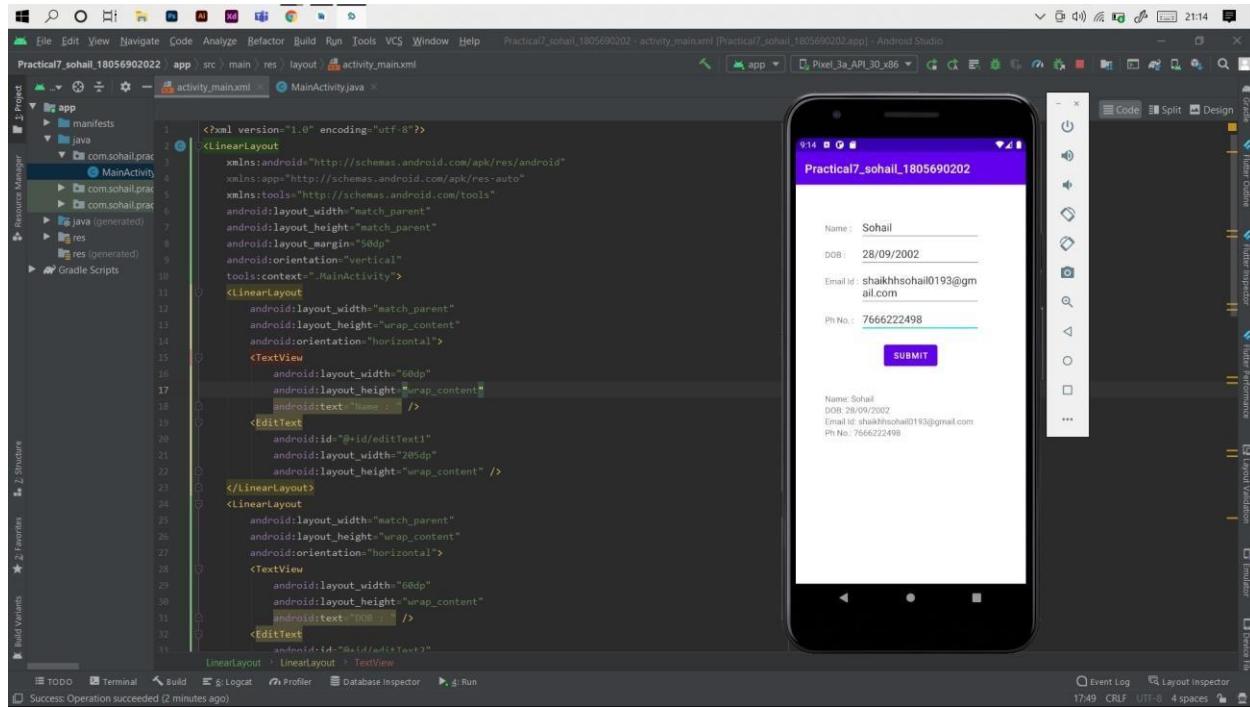
    Button b1; @Override protected void
    onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        e1=(EditText)findViewById(R.id.editText1);
        e2=(EditText)findViewById(R.id.editText2);
        e3=(EditText)findViewById(R.id.editText3);
        e4=(EditText)findViewById(R.id.editText4);
        t5=(TextView)findViewById(R.id.textView5);
        t6=(TextView)findViewById(R.id.textView6);
        t7=(TextView)findViewById(R.id.textView7);
        t8=(TextView)findViewById(R.id.textView8);

        b1=(Button)findViewById(R.id.button); b1.setOnClickListener(new
        View.OnClickListener() {
            @Override public void onClick(View view) {
                t5.setText("Name: "+e1.getText().toString());
                t6.setText("DOB: "+e2.getText().toString());
            }
        });
    }
}
```

```
t7.setText("Email Id: "+e3.getText().toString());
t8.setText("Ph No.: "+e4.getText().toString());
}
});
}
}

Output :
```



MAD Practicals

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Practical No.8

a) Write a program to create a first display screen of any search engine using Auto Complete Text View activity_main.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"
    tools:context=".MainActivity" android:orientation="vertical">

    <TextView android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:layout_marginLeft="50dp"
        android:textSize="18dp"
        android:text="Enter Country" />

    <AutoCompleteTextView
        android:id="@+id/autoCompleteTextView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:ems="10" />

</LinearLayout>
>MainActivity.java package
com.sohail.practical8_1805690202;
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.widget.ArrayAdapter; import android.widget.AutoCompleteTextView; public class MainActivity
extends AppCompatActivity {
String[] arr = { "France", "United
States", "Brazil", "Italy", "India", "Canada", "Egypt", "Australia", "Holland"};
AutoCompleteTextView autocomplete;
@Override protected void onCreate(Bundle
savedInstanceState) {
super.onCreate(savedInstanceState);
```

```

setContentView(R.layout.activity_main);

autocomplete =
    (AutoCompleteTextView) findViewById(R.id.autoCompleteTextView1);

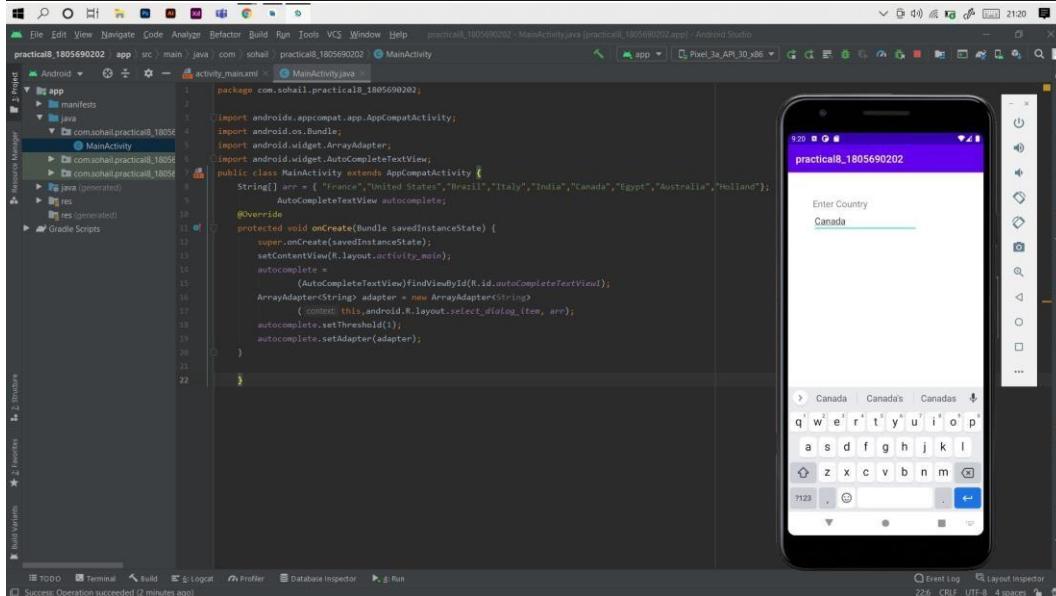
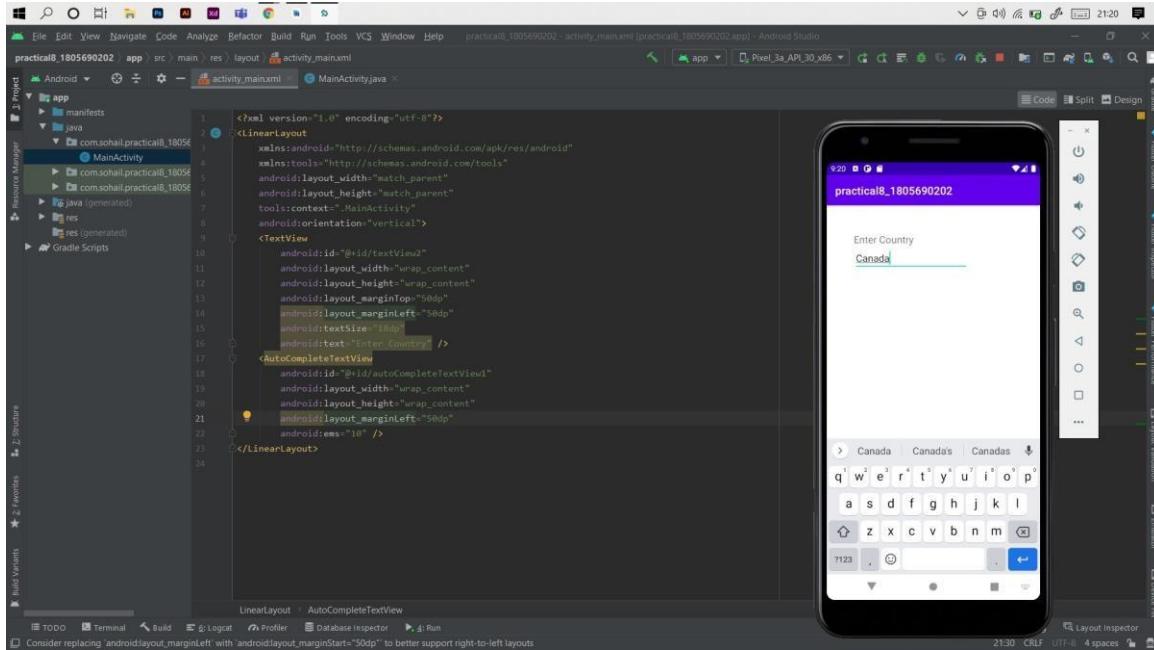
ArrayAdapter<String> adapter = new ArrayAdapter<String>
    (this, android.R.layout.select_dialog_item, arr);

autocomplete.setThreshold(1); autocomplete.setAdapter(adapter);

}
}

```

Output :



B) Write a program to display all the subjects of sixth semester using Auto

Complete Text View

Activity_main.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" tools:context=".MainActivity"
    android:orientation="vertical">

    <TextView android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:layout_marginLeft="50dp"
        android:textSize="18dp"
        android:text="Enter 6th Sem Subject" />

    <AutoCompleteTextView
        android:id="@+id/autoCompleteTextVie
        w1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:ems="10" />

</LinearLayout>
```

MainActivity.java package
com.sohail.practical8_1805690202;

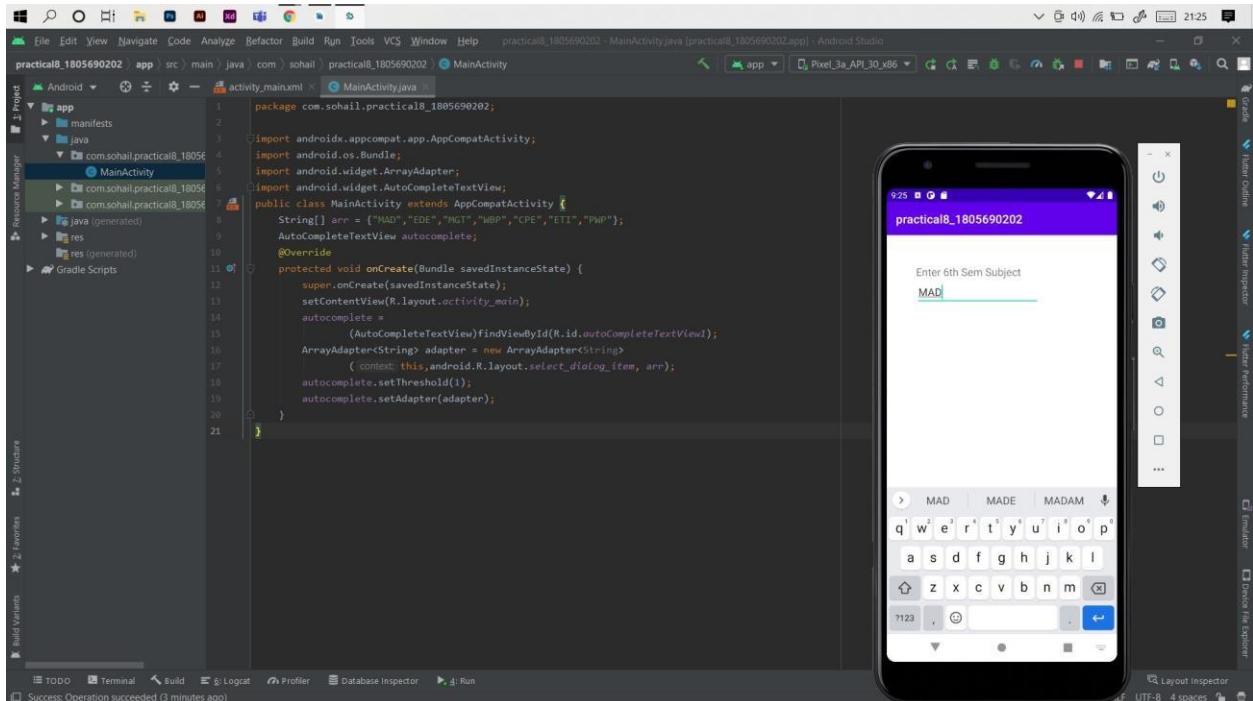
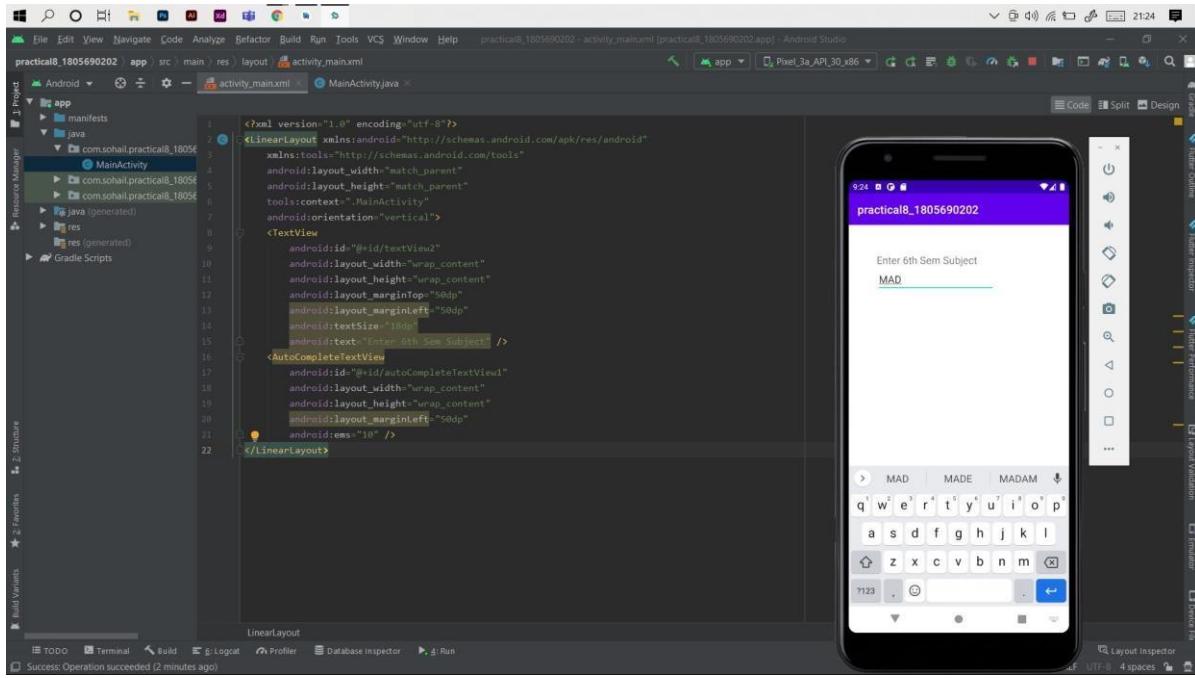
```
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.widget.ArrayAdapter; import android.widget.AutoCompleteTextView; public class MainActivity
extends AppCompatActivity {

    String[] arr = {"MAD","EDE","MGT","WBP","CPE","ETI","PWP"};

    AutoCompleteTextView autocomplete;
```

```
@Override protected void onCreate(Bundle  
savedInstanceState) {  
super.onCreate(savedInstanceState);  
setContentView(R.layout.activity_main);  
autocomplete =  
(AutoCompleteTextView)findViewById(R.id.autoCompleteTextView1);  
ArrayAdapter<String> adapter = new ArrayAdapter<String> (this, android.R.layout.select_dialog_item,  
arr);  
autocomplete.setThreshold(1); autocomplete.setAdapter(adapter);  
}  
}  
}
```

Output :



MAD Practicals

Khan Shahnawaz 1816080045

Practical No.9

- a) Write a program to create a toggle button to display ON/OFF Bluetooth on the display screen

Activity_main.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=".MainActivity">

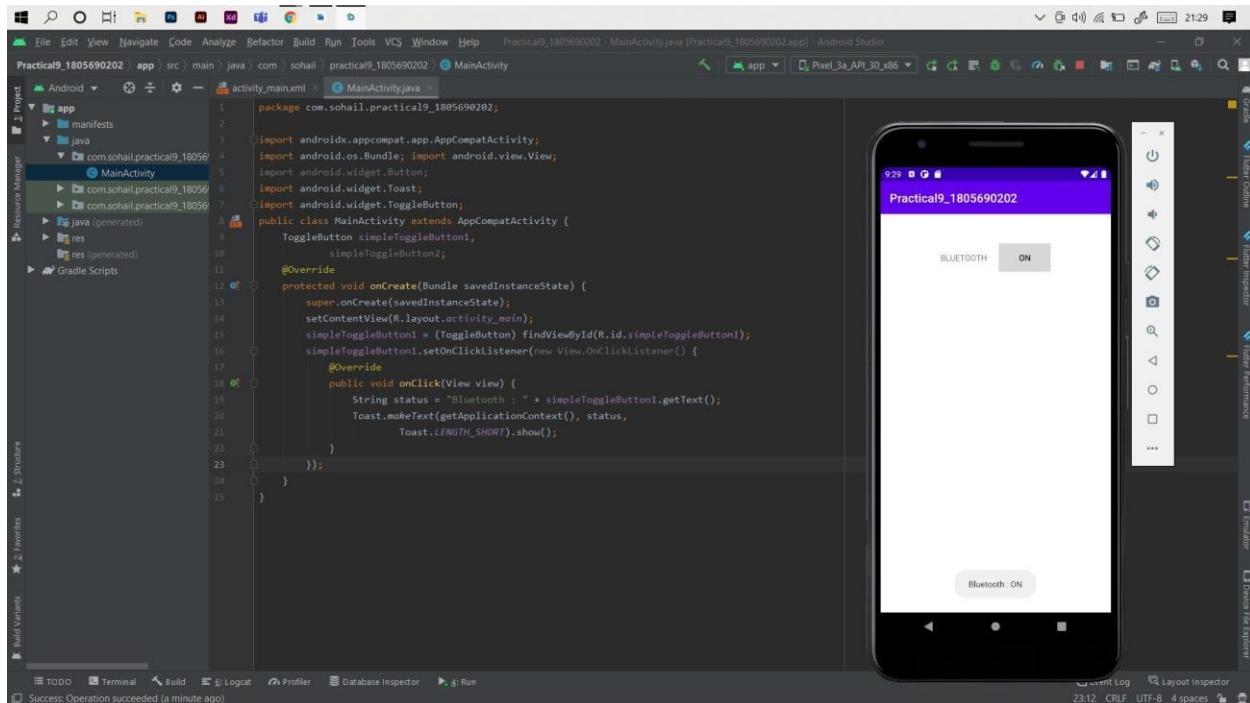
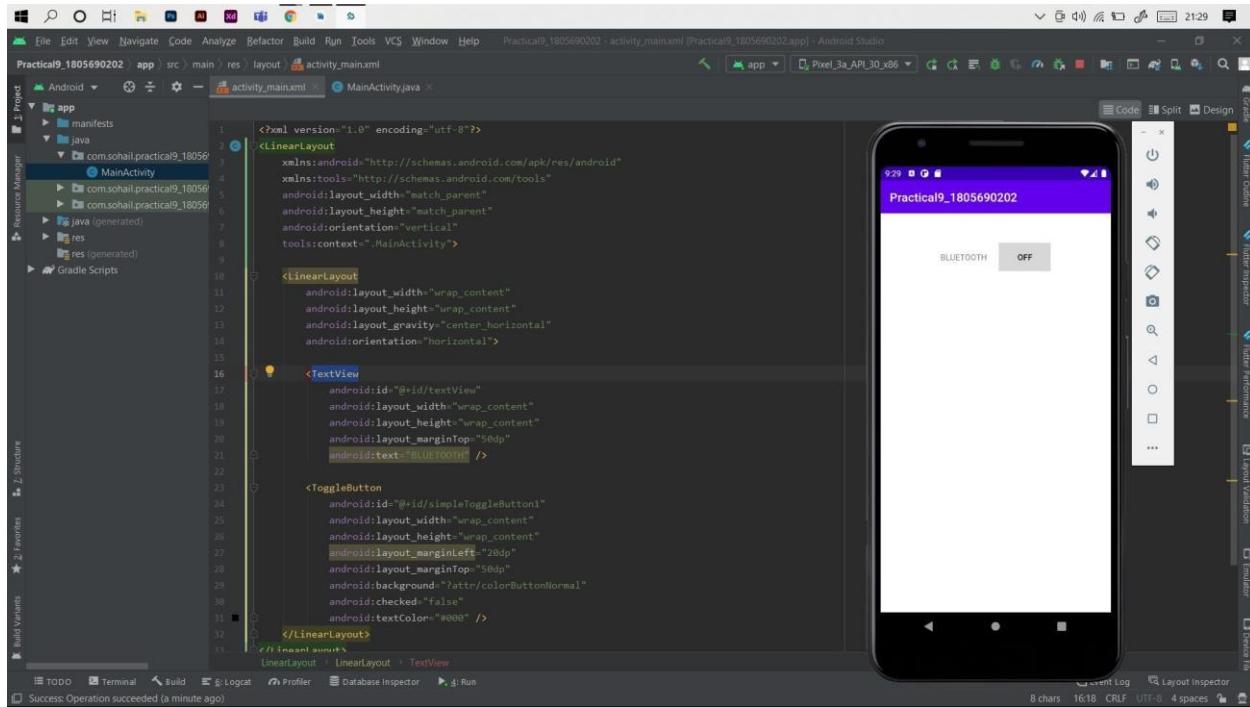
<LinearLayout android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"
    android:orientation="horizontal">

    <TextView android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:text="BLUETOOTH" /> <ToggleButton
        android:id="@+id/simpleToggleButton1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="20dp"
        android:layout_marginTop="50dp"
        android:background="?attr/colorButtonNormal"
        android:checked="false"
        android:textColor="#000" />

</LinearLayout>
</LinearLayout> MainActivity.java package
com.sohail.practical9_1805690202;
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.Button; import android.widget.Toast;
import android.widget.ToggleButton; public class MainActivity extends
AppCompatActivity { ToggleButton simpleToggleButton1, simpleToggleButton2;
@Override protected void onCreate(Bundle savedInstanceState) {
```

```
super.onCreate(savedInstanceState); setContentView(R.layout.activity_main);
simpleToggleButton1 = (ToggleButton) findViewById(R.id.simpleToggleButton1);
simpleToggleButton1.setOnClickListener(new View.OnClickListener() {
    @Override public void
    onClick(View view) {
        String status = "Bluetooth : " + simpleToggleButton1.getText();
        Toast.makeText(getApplicationContext(), status,
        Toast.LENGTH_SHORT).show();
    }
});
}
}

Output :
```



b) Write a program to create a simple calculator

Activity_main.xml

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

<RelativeLayout
    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=".MainActivity">

    <EditText
        android:id="@+id/editText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_marginTop="50dp"
        android:text="0" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_marginTop="20dp"
        android:background="#007bff"
        android:fontFamily="monospace"
        android:padding="10dp"
        android:text="CALCULATOR" />

```

```
    android:layout_height="match_parent"
    tools:context=".MainActivity" android:id="@+id/relative1">
        <EditText android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_margin="40dp"
            android:id="@+id/edt1"/>
        <Button
            style="?android:attr/buttonStyleSmall"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="1" android:id="@+id/button1"
            android:layout_marginLeft="60dp"
            android:layout_below="@+id/edt1" />
        <Button
            style="?android:attr/buttonStyleSmall"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="2" android:id="@+id/button2"
            android:layout_alignTop="@+id/button1"
            android:layout_toRightOf="@+id/button1" />
        <Button style="?android:attr/buttonStyleSmall"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="3" android:id="@+id/button3"
            android:layout_alignTop="@+id/button2"
            android:layout_toRightOf="@+id/button1" />
        <Button style="?android:attr/buttonStyleSmall"
            android:layout_width="wrap_content" android:layout_height="wrap_content"
            android:text="4" android:id="@+id/button4"
            android:layout_below="@+id/button1" android:layout_toLeftOf="@+id/button2" />
```

```
<Button style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="5" android:id="@+id/button5"
    android:layout_alignBottom="@+id/button4"
    android:layout_alignLeft="@+id/button2" />
<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="6" android:id="@+id/button6"
    android:layout_below="@+id/button3"
    android:layout_alignLeft="@+id/button3" />
<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="7" android:id="@+id/button7"
    android:layout_below="@+id/button4"
    android:layout_toLeftOf="@+id/button2" />
<Button style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="8" android:id="@+id/button8"
    android:layout_below="@+id/button5"
    android:layout_alignLeft="@+id/button5" />
<Button style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="9" android:id="@+id/button9"
```

```
    android:layout_below="@+id/button6"
    android:layout_alignLeft="@+id/button6" />
<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text "+" android:id="@+id/buttonadd"
    android:layout_alignTop="@+id/button3"
    android:layout_toRightOf="@+id/button3"
    android:layout_marginLeft="46dp"
    android:layout_marginStart="46dp"
    android:width="100dp" /> <Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text "-" android:id="@+id/buttonsub"
    android:layout_below="@+id/buttonadd"
    android:layout_alignLeft="@+id/buttonadd"
    android:width="100dp" /> <Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text "*"
    android:id="@+id/buttonmul"
    android:layout_below="@+id/buttonsub"
    android:layout_alignLeft="@+id/buttonsub"
    android:width="100dp" /> <Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text"." android:id="@+id/button10"
```

```
    android:layout_below="@+id/button7"
    android:layout_toLeftOf="@+id/button2" />
<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="0" android:id="@+id/button0"
    android:layout_below="@+id/button8"
    android:layout_alignLeft="@+id/button8" />
<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="C" android:id="@+id/buttonC"
    android:layout_below="@+id/button9"
    android:layout_alignLeft="@+id/button9" />
<Button style="?android:attr/buttonStyleSmall" android:layout_width="wrap_content"
    android:layout_height="wrap_content" android:text="/" android:id="@+id/buttondiv"
    android:layout_below="@+id/buttonmul"
    android:layout_alignLeft="@+id/buttonmul" android:width="100dp" />
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="=" android:id="@+id/buttononeql"
    android:layout_below="@+id/button0"
    android:layout_marginTop="15dp"
    android:layout_alignRight="@+id/buttondiv"
    android:layout_alignEnd="@+id/buttondiv"
    android:layout_alignLeft="@+id/button10"
```

```
        android:layout_alignStart="@+id/button10" />
    </RelativeLayout> MainActivity.java package
com.sohail.practical9_1805690202;

import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.Button; import android.widget.EditText; import
android.widget.Toast; import android.widget.ToggleButton; public class MainActivity
extends AppCompatActivity {

    Button button0 , button1 , button2 , button3 , button4 , button5 , button6
    ,
    button7 , button8 , button9 , buttonAdd , buttonSub ,
    buttonDivision , buttonMul , button10 , buttonC ,
    buttonEqual ; EditText edt1 ; float mValueOne , mValueTwo
    ; boolean mAddition , mSubtract ,mMultiplication ,mDivision
    ;

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

    button0      = (Button) findViewById(R.id.button0);

    button1      = (Button) findViewById(R.id.button1);

    button2      = (Button) findViewById(R.id.button2);

    button3      = (Button) findViewById(R.id.button3);

    button4      = (Button) findViewById(R.id.button4);

    button5      = (Button) findViewById(R.id.button5);

    button6      = (Button) findViewById(R.id.button6);

    button7      = (Button) findViewById(R.id.button7);

    button8      = (Button) findViewById(R.id.button8);

    button9      = (Button) findViewById(R.id.button9);

    button10 = (Button) findViewById(R.id.button10);
}
```

```
buttonAdd = (Button) findViewById(R.id.buttonadd);
buttonSub = (Button) findViewById(R.id.buttonsub);
buttonMul = (Button) findViewById(R.id.buttonmul);
buttonDivision = (Button) findViewById(R.id.buttondiv);
buttonC = (Button) findViewById(R.id.buttonC);
buttonEqual = (Button) findViewById(R.id.buttoneql); edt1
= (EditText) findViewById(R.id.edt1);
button1.setOnClickListener(new View.OnClickListener() {
@Override public void onClick(View v) {
edt1.setText(edt1.getText()+"1");
} });
button2.setOnClickListener(new View.OnClickListener() { @Override
public void onClick(View v) { edt1.setText(edt1.getText()+"2");
} });
button3.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { edt1.setText(edt1.getText()+"3");
} });
button4.setOnClickListener(new View.OnClickListener() { @Override
public void onClick(View v) { edt1.setText(edt1.getText()+"4");
} });
button5.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { edt1.setText(edt1.getText()+"5");
} });
button6.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { edt1.setText(edt1.getText()+"6");
} });
button7.setOnClickListener(new View.OnClickListener() {
```

```
@Override  
public void onClick(View v) { edt1.setText(edt1.getText()+"7");  
} });  
  
button8.setOnClickListener(new View.OnClickListener() {  
  
@Override  
public void onClick(View v) { edt1.setText(edt1.getText()+"8");  
} });  
  
button9.setOnClickListener(new View.OnClickListener() {  
  
@Override  
public void onClick(View v) { edt1.setText(edt1.getText()+"9");  
} });  
  
button0.setOnClickListener(new View.OnClickListener() {  
  
@Override  
public void onClick(View v) { edt1.setText(edt1.getText()+"0");  
} });  
  
buttonAdd.setOnClickListener(new View.OnClickListener() {  
  
@Override  
public void onClick(View v) { if  
(edt1 == null){  
edt1.setText("");  
}  
else  
{ mValueOne = Float.parseFloat(edt1.getText() + ""); mAddition  
= true; edt1.setText(null);  
}  
} });  
  
buttonSub.setOnClickListener(new View.OnClickListener() {  
  
@Override  
public void onClick(View v) {
```

```
mValueOne = Float.parseFloat(edt1.getText() + ""); mSubtract
= true ; edt1.setText(null);
}
});
buttonMul.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { mValueOne =
Float.parseFloat(edt1.getText() + "");
mMultiplication = true ; edt1.setText(null);
}
});
buttonDivision.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { mValueOne =
Float.parseFloat(edt1.getText()+""); mDivision =
true ; edt1.setText(null);
}
});
buttonEqual.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { mValueTwo =
Float.parseFloat(edt1.getText() + ""); if (mAddition
== true){ edt1.setText(mValueOne + mValueTwo
+ ""); mAddition=false;
}
if (mSubtract == true){ edt1.setText(mValueOne
- mValueTwo+""); mSubtract=false;
}
if (mMultiplication == true){ edt1.setText(mValueOne
* mValueTwo+""); mMultiplication=false;
}
```

```
}

if (mDivision == true){ edt1.setText(mValueOne
/ mValueTwo+""); mDivision=false;
}

} });

buttonC.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) { edt1.setText(""); }

});

button10.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) { edt1.setText(edt1.getText()+" .");

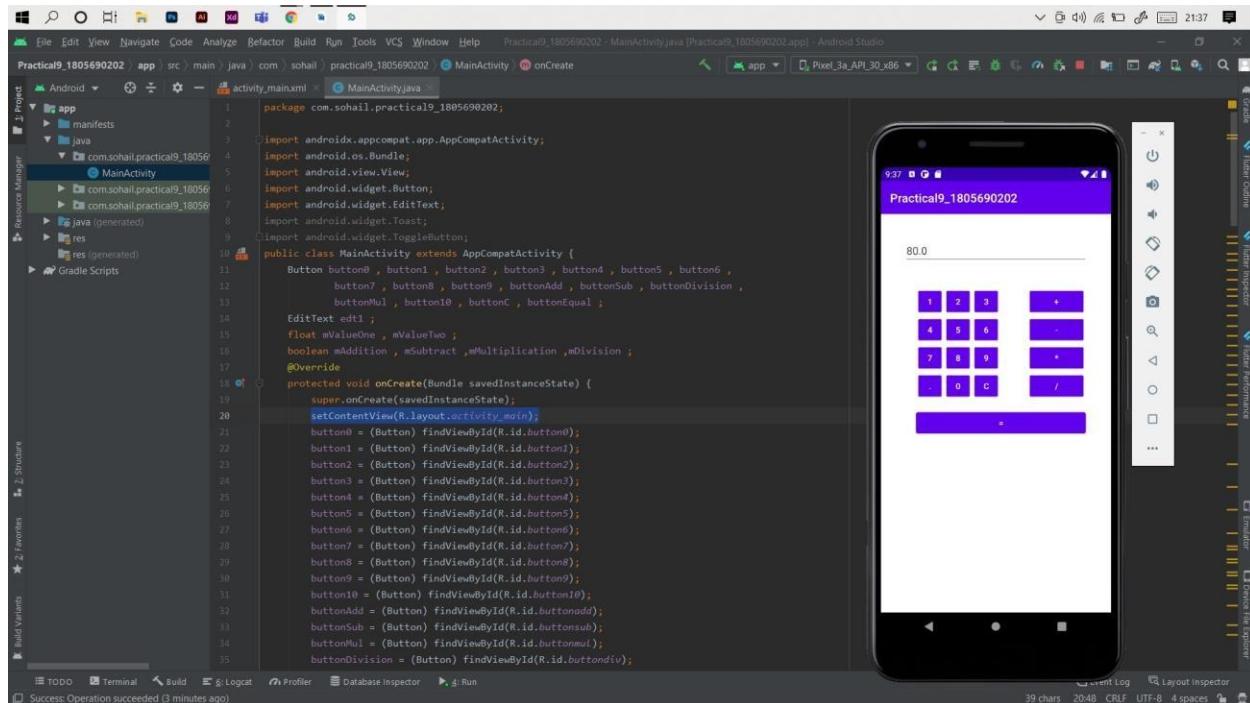
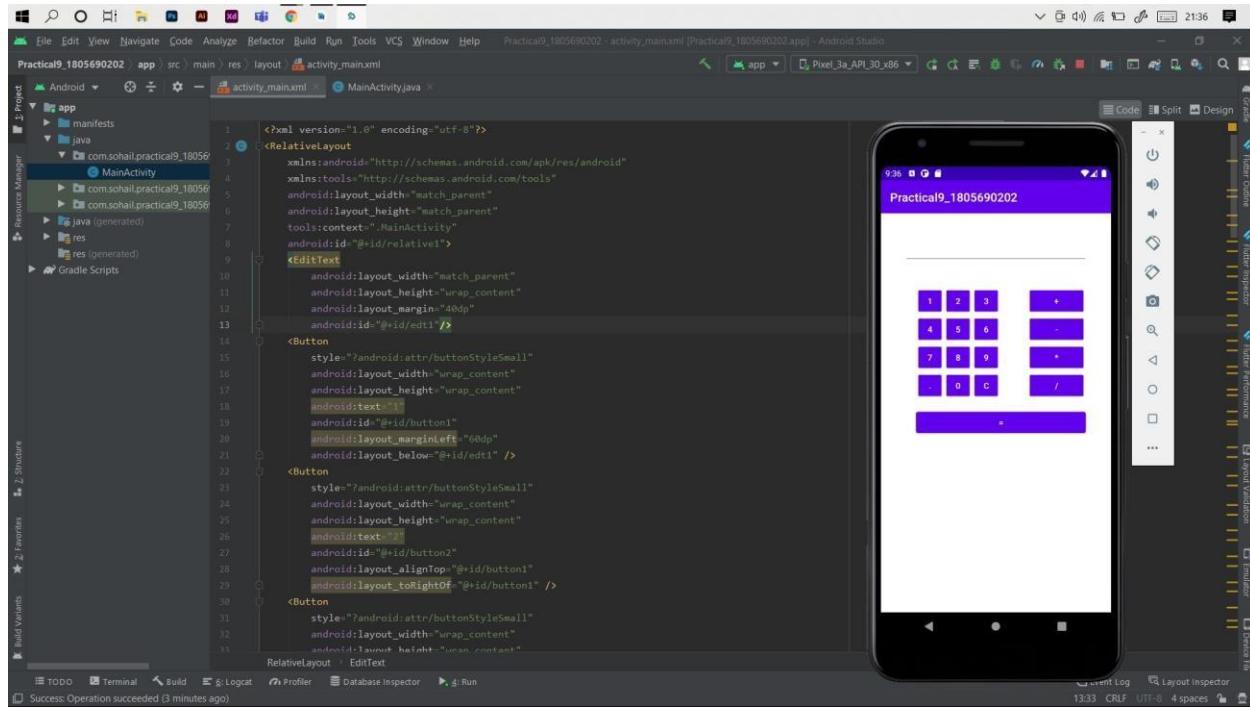
}

});

}

}

Output :
```



MAD Practicals

Khan Shahnawaz 1816080045

Practical No.10

a) Write a program to create a login form for an E-commerce site

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:id="@+id/textView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"

    android:layout_gravity="center"
    android:layout_marginTop="30dp"

    android:text="Login"
    android:textSize="27dp"
    android:textStyle="bold" /> <ImageView
    android:id="@+id/imageView"

    android:layout_width="200dp"
    android:layout_height="80dp"

    android:layout_below="@+id/textView1"
    android:layout_gravity="center" android:src="@drawable/amazon"
    />

<EditText android:layout_width =
    "match_parent" android:layout_height
    = "wrap_content" android:id =
    "@+id/editText1" android:hint = "Enter
    Email or Mobile Number"
    android:layout_marginTop="50dp"
    android:layout_marginLeft="40dp"
    android:layout_marginRight="40dp"
    android:layout_below =
    "@+id/imageView" />
```

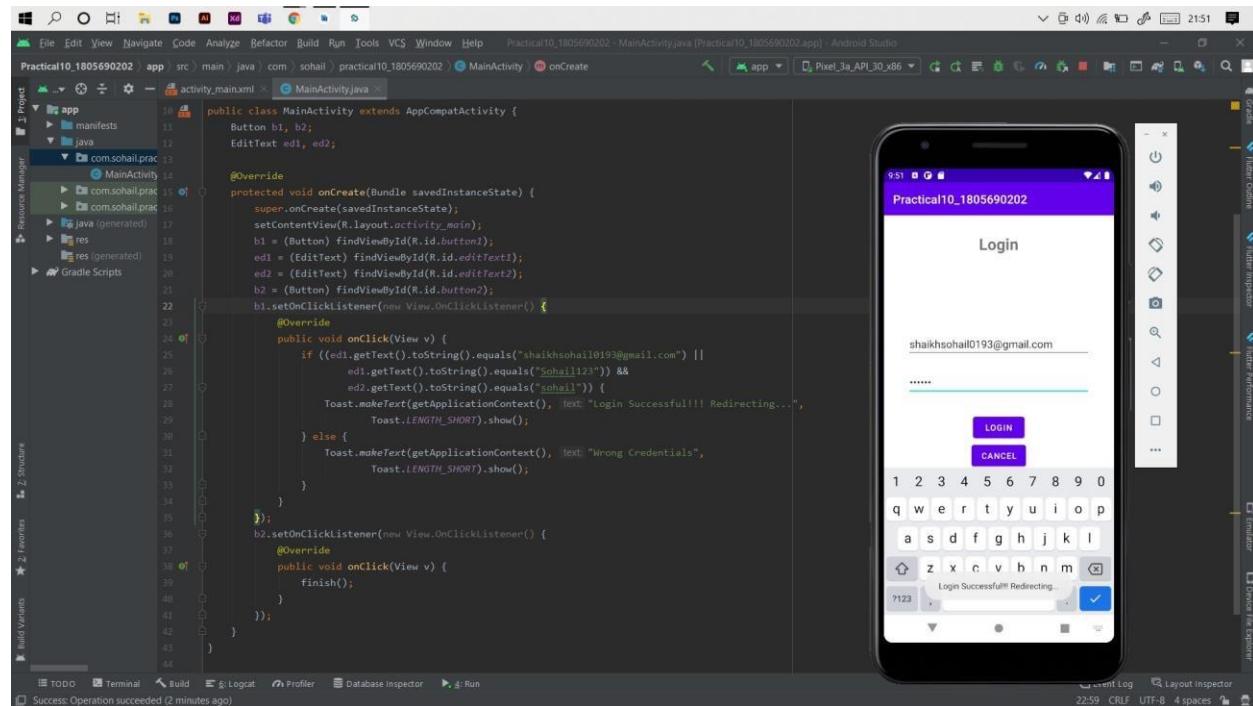
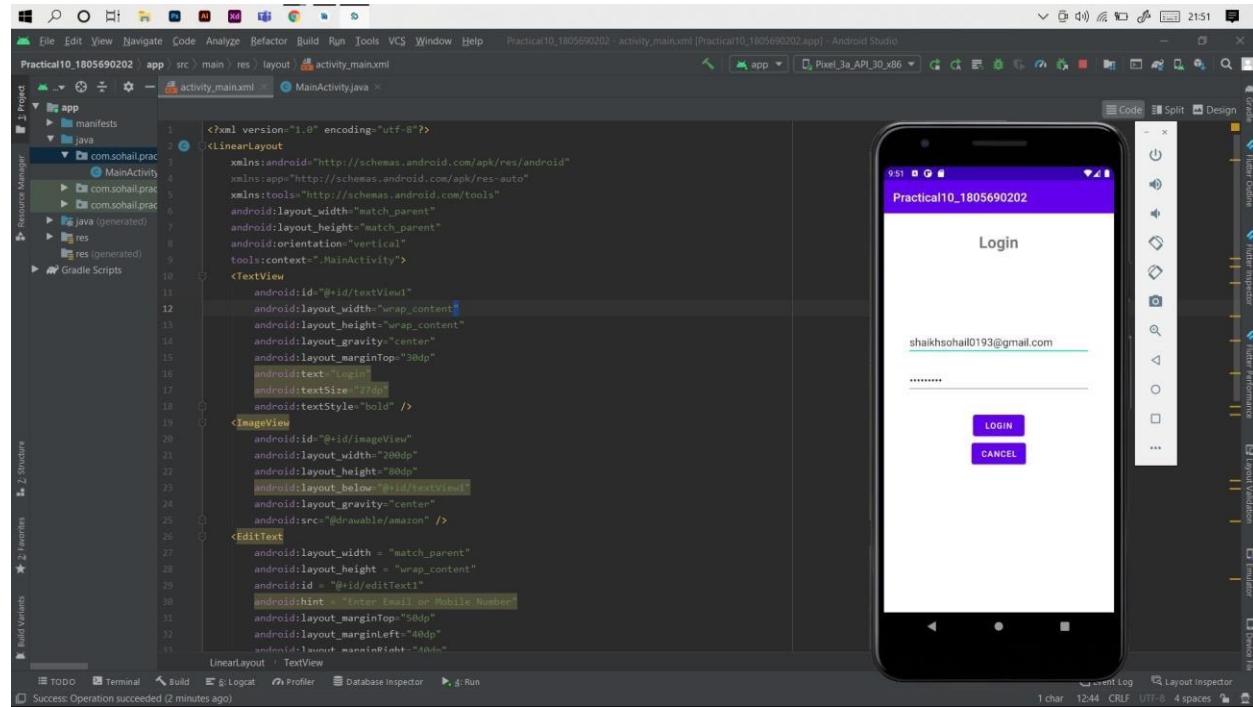
```
<EditText android:layout_width="match_parent"
    android:layout_height="wrap_content" android:inputType="textPassword"
    android:id="@+id/editText2" android:layout_marginTop="20dp"
    android:layout_marginLeft="40dp" android:layout_marginRight="40dp"
    android:layout_below="@+id/editText1" android:hint="Password" />
<Button android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="login"
    android:id="@+id/button1"
    android:layout_gravity="center"
    android:layout_marginTop="30dp"/>
<Button android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Cancel"
    android:id="@+id/button2"
    android:layout_gravity="center" />
</LinearLayout> MainActivity.java package
com.sohail.practical10_1805690202;
import androidx.appcompat.app.AppCompatActivity; import android.graphics.Color; import
android.os.Bundle; import android.view.View; import android.widget.Button; import
android.widget.EditText; import android.widget.Toast; public class MainActivity extends
AppCompatActivity {
    Button b1, b2;
    EditText ed1, ed2; @Override protected void
    onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main); b1 =
        (Button) findViewById(R.id.button1);
        ed1 = (EditText) findViewById(R.id.editText1); ed2
        = (EditText) findViewById(R.id.editText2);
```

```
b2 = (Button) findViewById(R.id.button2); b1.setOnClickListener(new
View.OnClickListener() {
@Override
public void onClick(View v) {
if
((ed1.getText().toString().equals("shaikhsohail0193@gmail.com") ||
ed1.getText().toString().equals("Sohail123")) && ed2.getText().toString().equals("sohail"))
{
Toast.makeText(getApplicationContext(), "Login
Successful!!! Redirecting...",
Toast.LENGTH_SHORT).show();
} else {
Toast.makeText(getApplicationContext(), "Wrong
Credentials",
Toast.LENGTH_SHORT).show();
}
}
});
```

```
b2.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { finish();
}
});
```

```
}
```

Output :



MAD Practicals
Khan Shahnawaz 1816080045

Practical No-11

- a) Write a program to show five checkboxes and toast selected checkboxes

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent" android:layout_height="fill_parent"
    android:layout_marginLeft="30dp"
    android:orientation="vertical" >
<TextView android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Select Your Programming language: "
    android:textSize="20sp" android:textStyle="bold"
/>
<CheckBox android:id="@+id/chkAndroid"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:text="Android" />
<CheckBox android:id="@+id/chkJava"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Java" /> <CheckBox
    android:id="@+id/chkPHP"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="PHP" /> <CheckBox
    android:id="@+id/chkPython"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Python" />
<CheckBox android:id="@+id/chkPerl"
    android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:text="Perl" />
    <Button android:id="@+id(btnDisplay"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:text="Display" /></LinearLayout>

```

MainActivity.java package

```
com.sohail.practical11_1805690202;
```

```
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.Button; import android.widget.CheckBox; import
android.widget.Toast; public class MainActivity extends AppCompatActivity { private
CheckBox android, java, php, python, perl; private Button btnDisplay;
```

```
@Override public void onCreate(Bundle
savedInstanceState) {
```

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
addListenerOnChkAndroid();
addListenerOnChkJava(); addListenerOnChkPHP();
addListenerOnChkPython();
addListenerOnChkPerl(); addListenerOnButton();
}
```

```
public void addListenerOnChkAndroid() { android =
(CheckBox) findViewById(R.id.chkAndroid);
android.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { if
(((CheckBox) v).isChecked()) {
Toast.makeText(MainActivity.this,
"Android", Toast.LENGTH_LONG).show();
}
}}
```

```
}

});

}

public void addListenerOnChkJava() { java =
(CheckBox) findViewById(R.id.chkJava);
java.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { if
(((CheckBox) v).isChecked()) {
Toast.makeText(MainActivity.this,
"Java", Toast.LENGTH_LONG).show();
}
}
});

}

public void addListenerOnChkPHP() { php =
(CheckBox) findViewById(R.id.chkPHP);
php.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) { if
(((CheckBox) v).isChecked()) {
Toast.makeText(MainActivity.this,
"PHP", Toast.LENGTH_LONG).show();
}
}
});

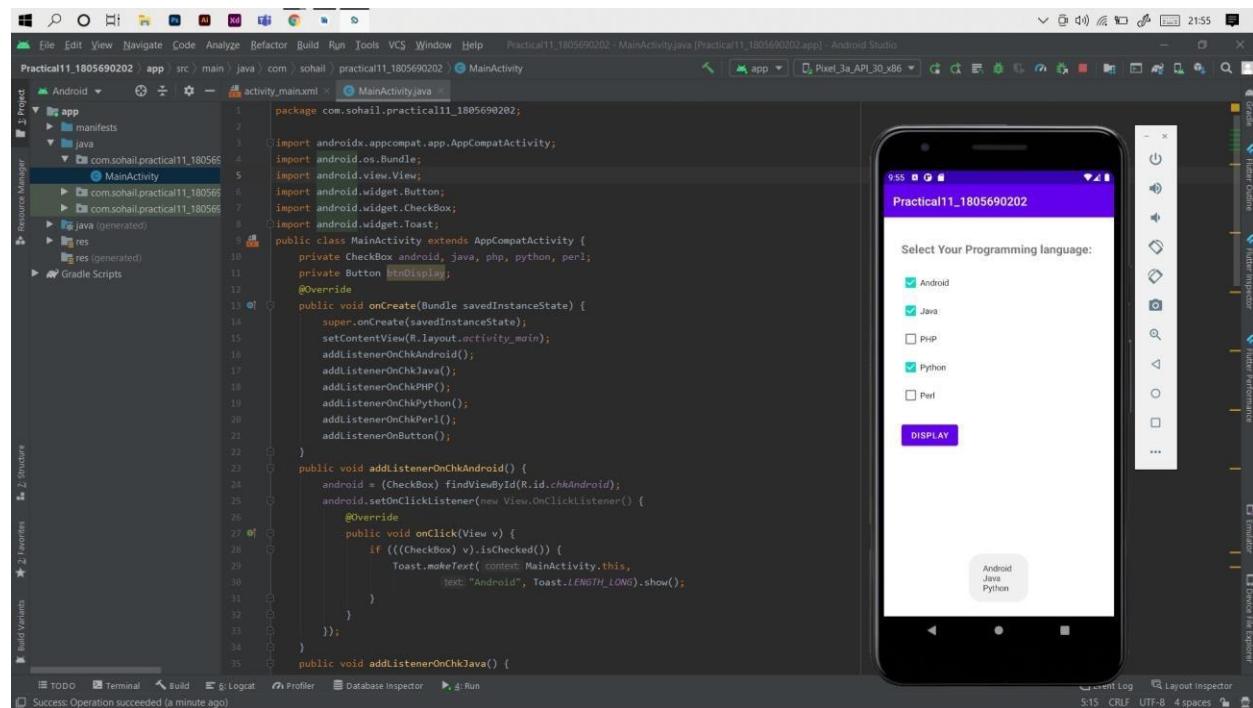
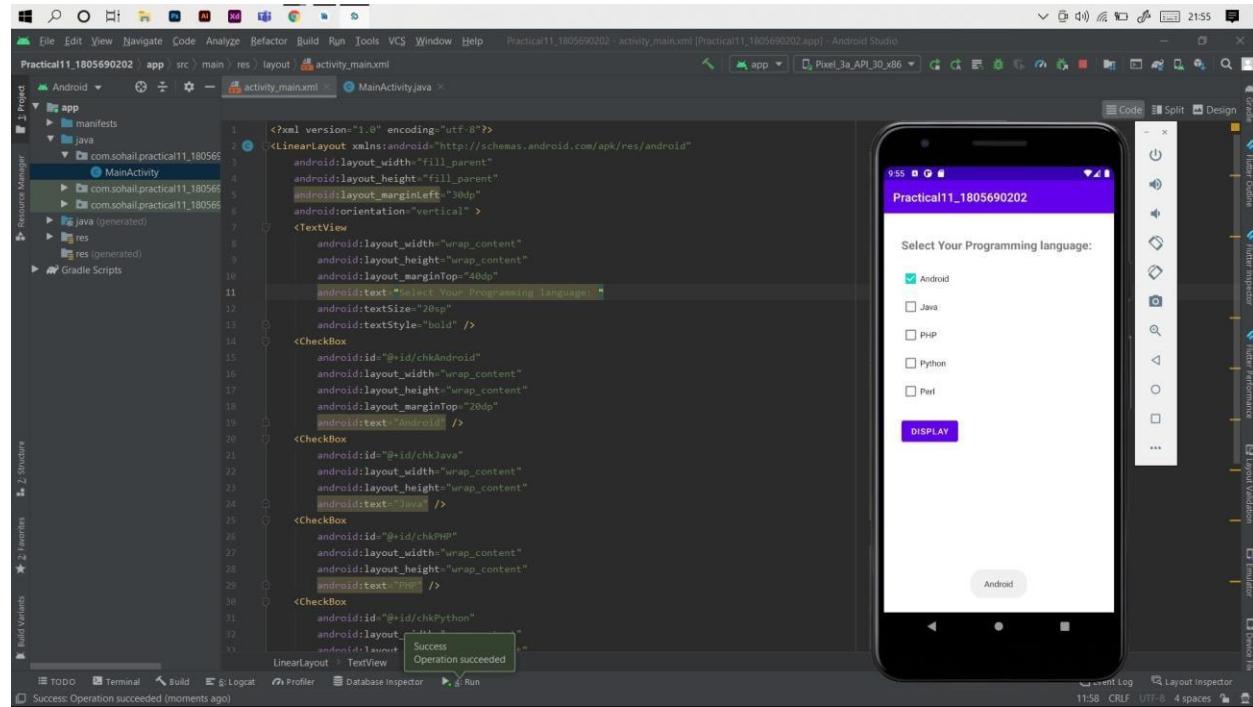
}

public void addListenerOnChkPython() { python =
(CheckBox) findViewById(R.id.chkPython);
python.setOnClickListener(new View.OnClickListener() {
```

```
@Override  
public void onClick(View v) { if  
(((CheckBox) v).isChecked()) {  
Toast.makeText(MainActivity.this,  
"Python", Toast.LENGTH_LONG).show();  
}  
}  
});  
}  
  
public void addListenerOnChkPerl() {  
perl = (CheckBox) findViewById(R.id.chkPerl); perl.setOnClickListener(new  
View.OnClickListener() {  
@Override  
public void onClick(View v) { if  
(((CheckBox) v).isChecked()) {  
Toast.makeText(MainActivity.this,  
"Perl", Toast.LENGTH_LONG).show();  
}  
}  
});  
}  
  
public void addListenerOnButton() { android = (CheckBox)  
findViewById(R.id.chkAndroid); java = (CheckBox)  
findViewById(R.id.chkJava); php = (CheckBox)  
findViewById(R.id.chkPHP); python = (CheckBox)  
findViewById(R.id.chkPython); perl = (CheckBox)  
findViewById(R.id.chkPerl); btnDisplay = (Button)  
findViewById(R.id.btnDisplay);  
btnDisplay.setOnClickListener(new View.OnClickListener() {  
@Override
```

```
public void onClick(View v) {  
    StringBuffer result = new StringBuffer();  
    if (android.isChecked()) {  
        result.append("Android"); } if  
(java.isChecked()) {  
        result.append("\nJava"); } if  
(php.isChecked()) {  
        result.append("\nPHP"); } if  
(python.isChecked()) {  
        result.append("\nPython"); } if  
(perl.isChecked()) {  
        result.append("\nPerl"); }  
    Toast.makeText(MainActivity.this, result.toString(),  
    Toast.LENGTH_LONG).show();  
}  
});  
}  
}
```

Output :



MAD Practicals
Khan Shahnawaz 1816080045

Practical No.12

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:id="@+id/textView1"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="30dp"
    android:gravity="center_horizontal"
    android:textSize="22dp"
    android:text="Single Radio Buttons" />

<RadioButton
    android:id="@+id/radioButton1"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"
    android:text="Radio Button 1"
    android:layout_marginTop="20dp"
    android:textSize="20dp" /> <RadioButton
    android:id="@+id/radioButton2"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Radio Button 2"
    android:layout_marginTop="10dp"
    android:textSize="20dp" /> <View
    android:layout_width="fill_parent"
    android:layout_height="1dp"

        android:layout_marginTop="20dp"
        android:background="#B8B894" />
```

```
<TextView android:id="@+id/textView2"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="30dp"
    android:gravity="center_horizontal"
    android:textSize="22dp" android:text="Radio
button inside RadioGroup" />

<!-- Customized RadioButtons -->

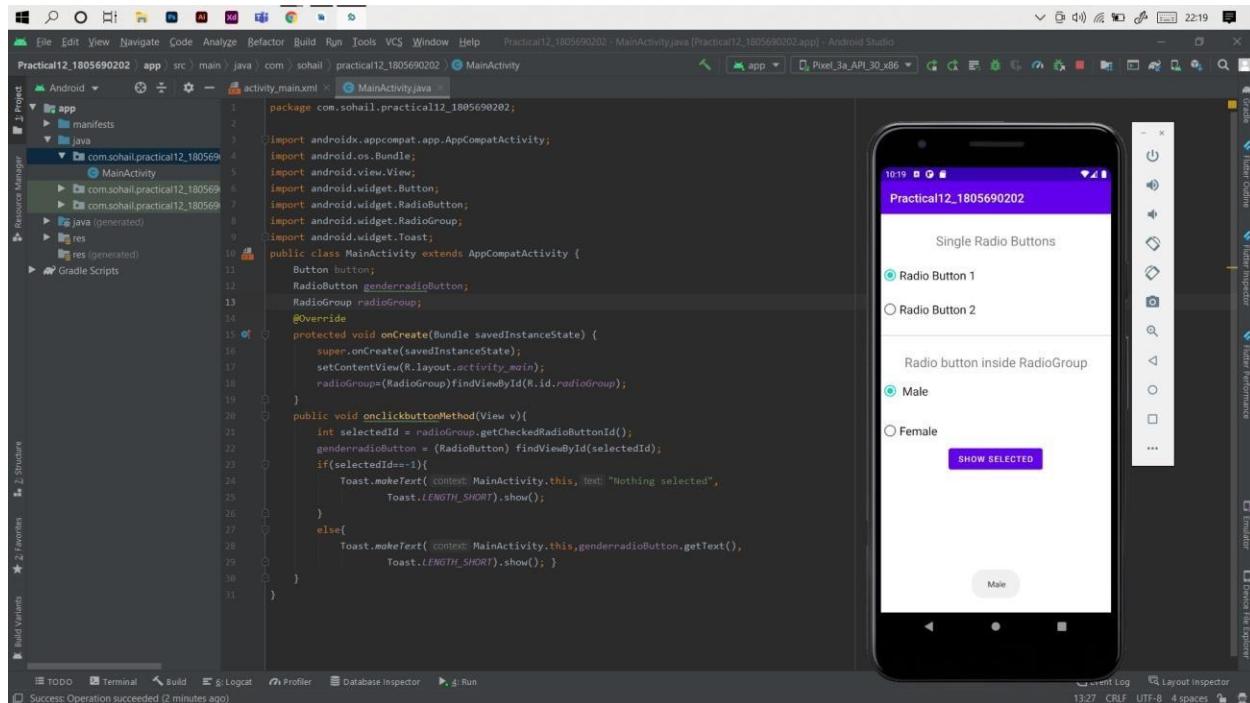
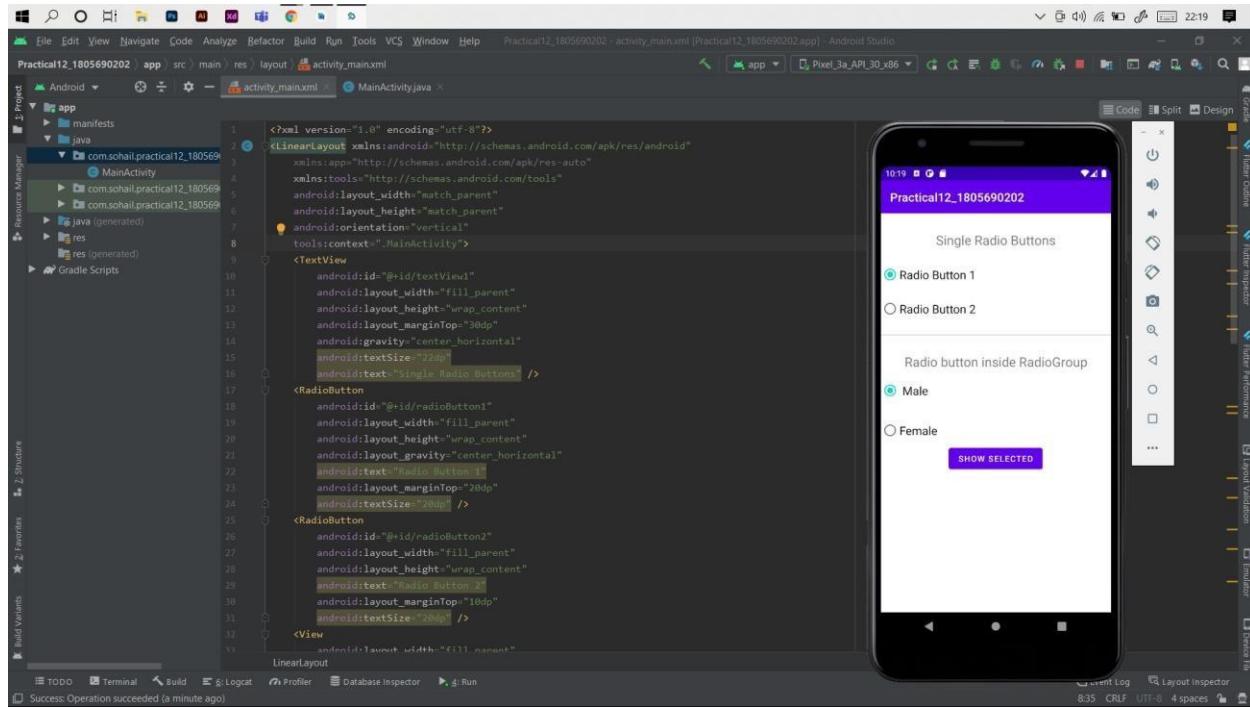
<RadioGroup
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/radioGroup">

    <RadioButton android:id="@+id/radioMale"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text=" Male"
        android:layout_marginTop="10dp"
        android:checked="false"
        android:textSize="20dp" />

    <RadioButton android:id="@+id/radioFemale"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Female"
        android:layout_marginTop="20dp"
        android:checked="false"
        android:textSize="20dp" />

</RadioGroup> <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Show Selected"
    android:id="@+id/button"
```

```
    android:onClick="onclickbuttonMethod"
    android:layout_gravity="center_horizontal" />
</LinearLayout> MainActivity.java package
com.sohail.practical12_1805690202;
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.Button; import android.widget.RadioButton; import
android.widget.RadioGroup; import android.widget.Toast; public class MainActivity extends
AppCompatActivity {
    Button button;
    RadioButton genderradioButton;
    RadioGroup radioGroup;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState); setContentView(R.layout.activity_main);
        radioGroup=(RadioGroup)findViewById(R.id.radioGroup);
    }
    public void onclickbuttonMethod(View v){ int selectedId =
        radioGroup.getCheckedRadioButtonId(); genderradioButton
        = (RadioButton) findViewById(selectedId); if(selectedId== -1){
            Toast.makeText(MainActivity.this,"Nothing selected",
            Toast.LENGTH_SHORT).show();
        }
        else{
            Toast.makeText(MainActivity.this,genderradioButton.getText(),
            Toast.LENGTH_SHORT).show(); }
    }
}
Output :
```



MAD Practicals

Khan Shahnawaz 1816080045

Practical No.13

a) Write a program to display circular progress bar

activity_main.xml

```
<?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"
    tools:context=".MainActivity">

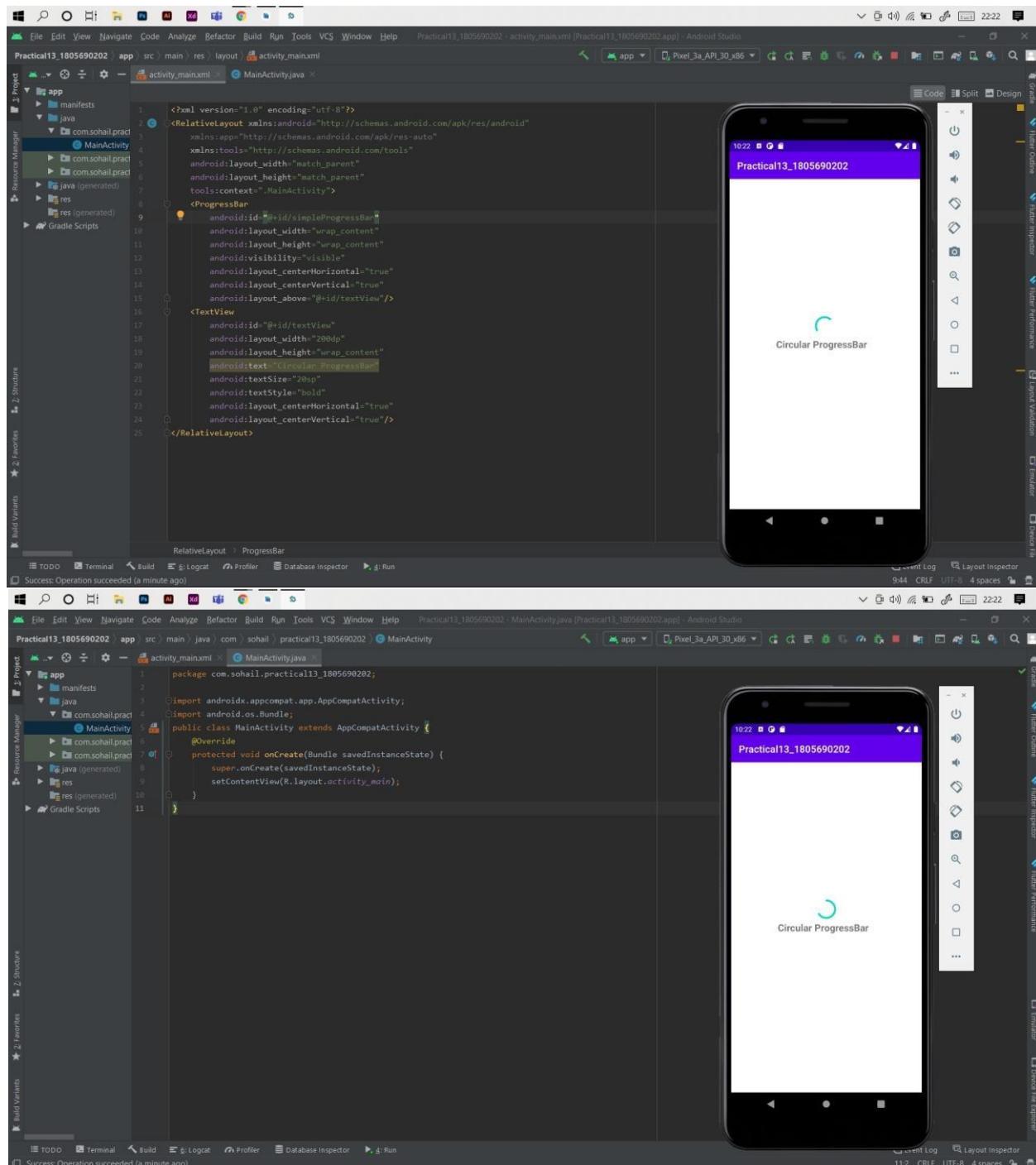
    <ProgressBar
        android:id="@+id/simpleProgressBar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" android:visibility="visible"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"
        android:layout_above="@+id/textView"/>

    <TextView android:id="@+id/textView"
        android:layout_width="200dp"
        android:layout_height="wrap_content"
        android:text="Circular ProgressBar"
        android:textSize="20sp"
        android:textStyle="bold"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"/>
</RelativeLayout> MainActivity.java package
com.sohail.practical13_1805690202; 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);
    }
}
```

}

Output :



b) activity_main.xml

```
<?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"
    tools:context=".MainActivity">

    <ProgressBar
        android:id="@+id/simpleProgressBar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:visibility="visible"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"
        android:layout_above="@+id/textView"/>

    <TextView
        android:id="@+id/textView"
        android:layout_width="200dp"
        android:layout_height="wrap_content"
        android:text="Circular ProgressBar"
        android:textSize="20sp"
        android:textStyle="bold"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"/>
</RelativeLayout>
```

```
        android:layout_width="match_parent" android:layout_height="match_parent"
        tools:context=".MainActivity">
    <Button android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="DOWNLOAD FILE"
            android:id="@+id/button"
            android:layout_centerVertical="true"
            android:layout_centerHorizontal="true" />
</RelativeLayout>

```

MainActivity.java package

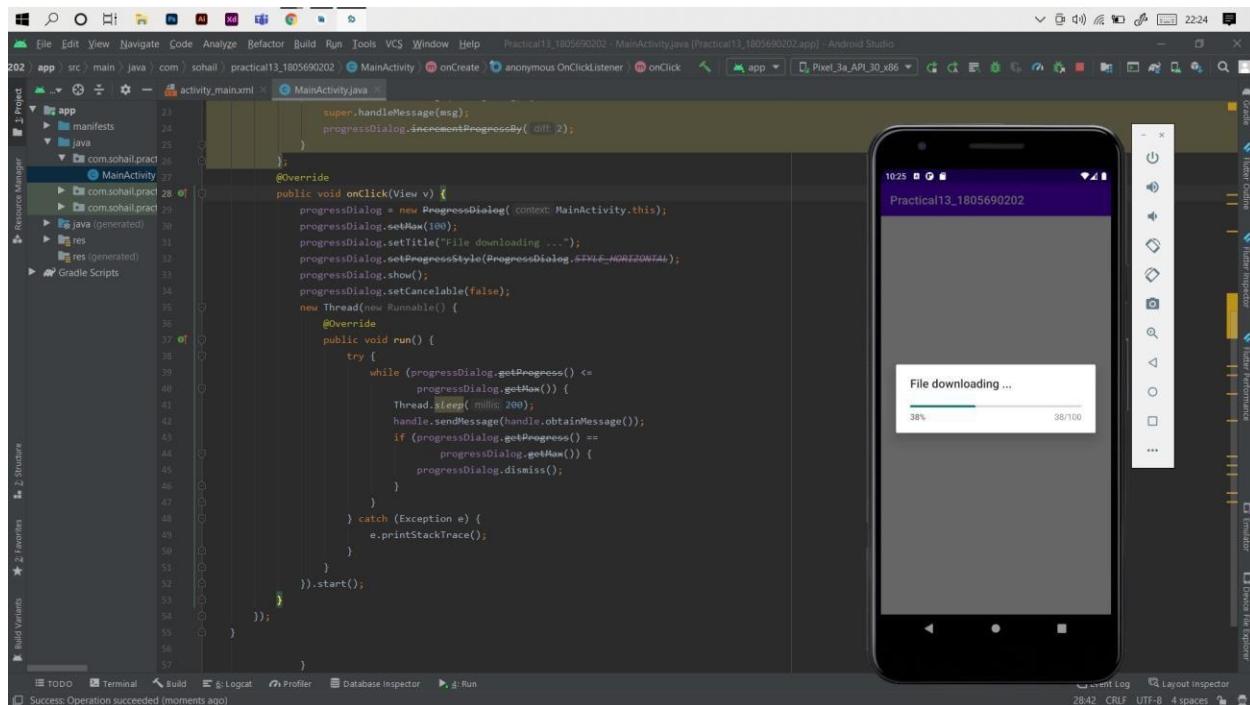
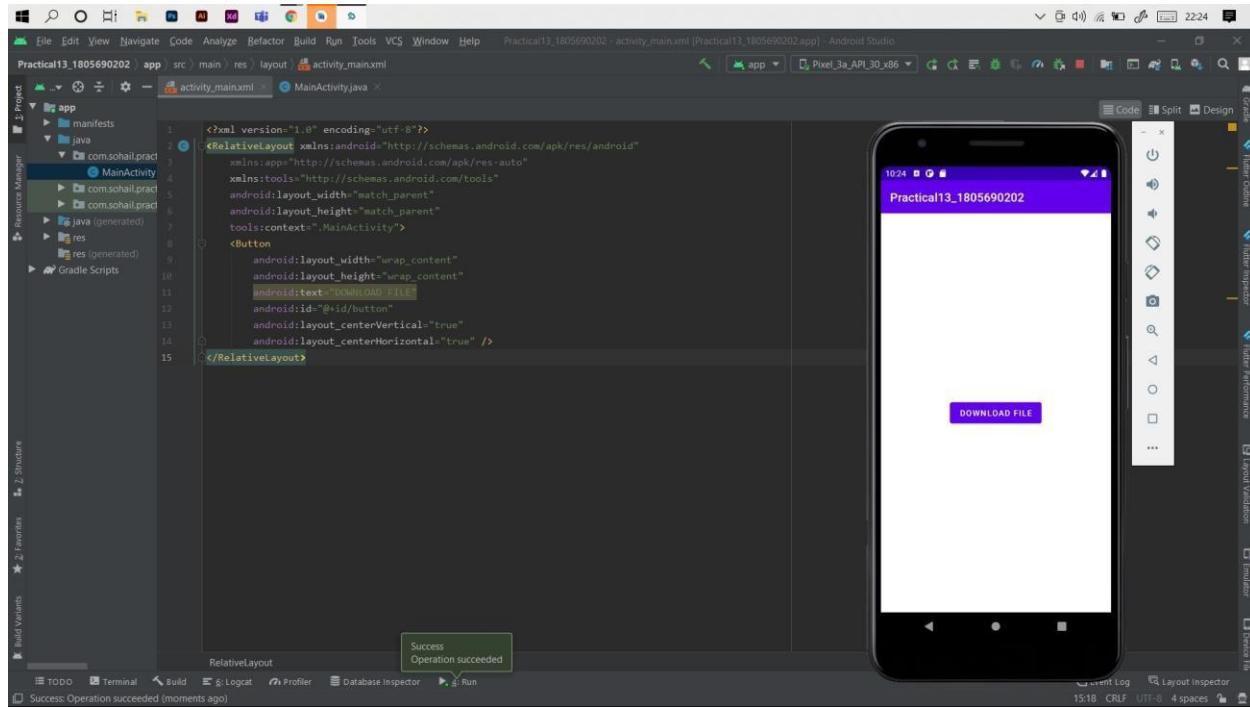
```
com.sohail.practical13_1805690202;
```

```
import androidx.appcompat.app.AppCompatActivity; import android.app ProgressDialog; import
android.os.Bundle; import android.os.Message; import android.os.Handler; import android.view.View;
import android.widget.Button; import android.widget.ProgressBar; import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    Button b1;
    ProgressDialog progressDialog;
    @Override protected void onCreate(Bundle
            savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main); b1 =
        (Button) findViewById(R.id.button);
        b1.setOnClickListener(new View.OnClickListener() {
            Handler handle = new Handler() { public void
                handleMessage(Message msg) {
                    super.handleMessage(msg);
                    progressDialog.incrementProgressBy(2);
                }
            };
        });
    }
    @Override

```

```
public void onClick(View v) { progressDialog = new
ProgressDialog(MainActivity.this); progressDialog.setMax(100);
progressDialog.setTitle("File downloading ...");
progressDialog.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
progressDialog.show(); progressDialog.setCancelable(false); new
Thread(new Runnable() {
@Override
public void run() { try
{
while (progressDialog.getProgress() <=
progressDialog.getMax()) { Thread.sleep(200);
handle.sendMessage(handle.obtainMessage());
if (progressDialog.getProgress() ==
progressDialog.getMax()) {
progressDialog.dismiss();
}
}
} catch (Exception e) {
e.printStackTrace();
}
}
}).start();
}
});
}
}

Output :
```



MAD Practicals

Khan Shahnawaz 1816080045

Practical No.14

Activity_main.xml

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

```
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent" tools:context=".MainActivity">
    <ListView android:id="@+id/lv"
        android:layout_width="match_parent"
        android:layout_height="match_parent">
    </ListView>
</androidx.constraintlayout.widget.ConstraintLayout>

MainActivity.java package
com.sohail.practical14_1805690202;

import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.AdapterView; import android.widget.ArrayAdapter;
import android.widget.ListView; import android.widget.Toast; public class MainActivity extends
AppCompatActivity {

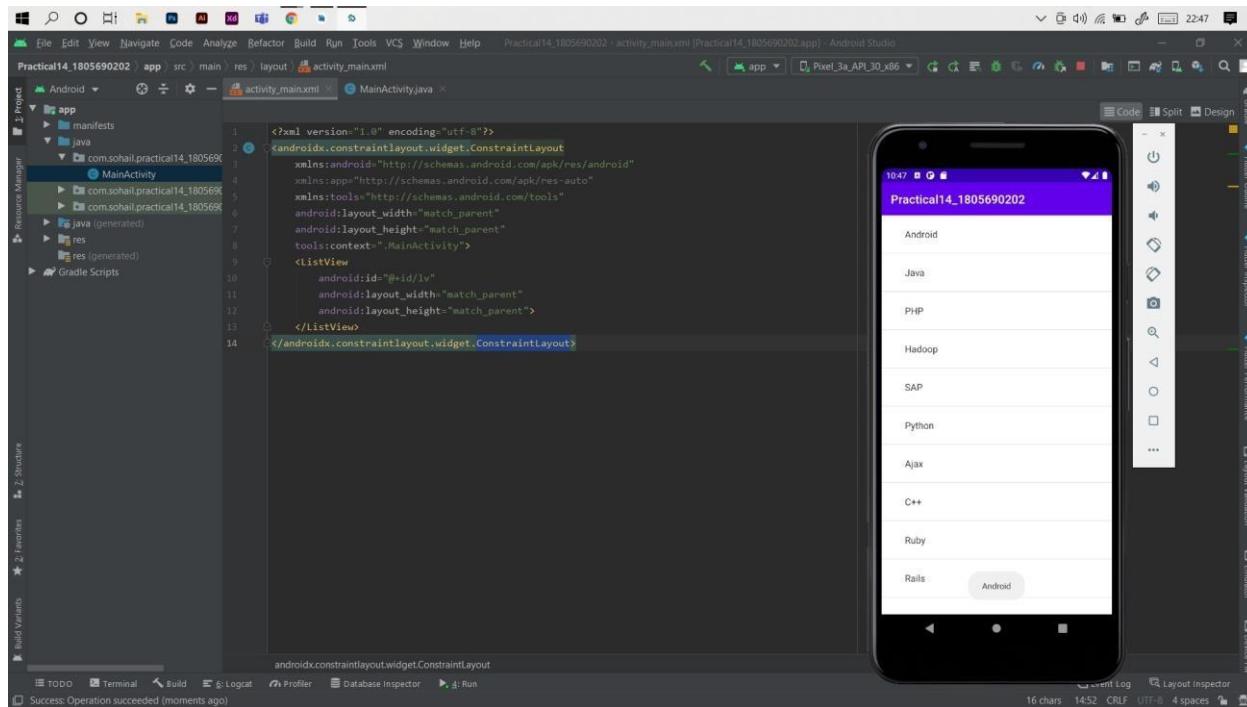
String language[]=
{"Android","Java","PHP","Hadoop","SAP","Python","Ajax","C++","Ruby","Rails"}; ListView
lv;
@Override protected void onCreate(Bundle
savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
lv=(ListView)findViewById(R.id.lv);
ArrayAdapter<String> a=new
ArrayAdapter<String>(this,android.R.layout.simple_ex
pandable_list_item_1,language); lv.setAdapter(a);
lv.setOnItemClickListener(new
AdapterView.OnItemClickListener() {
@Override public void onItemClick(AdapterView<?> adapterView,
View view, int
```

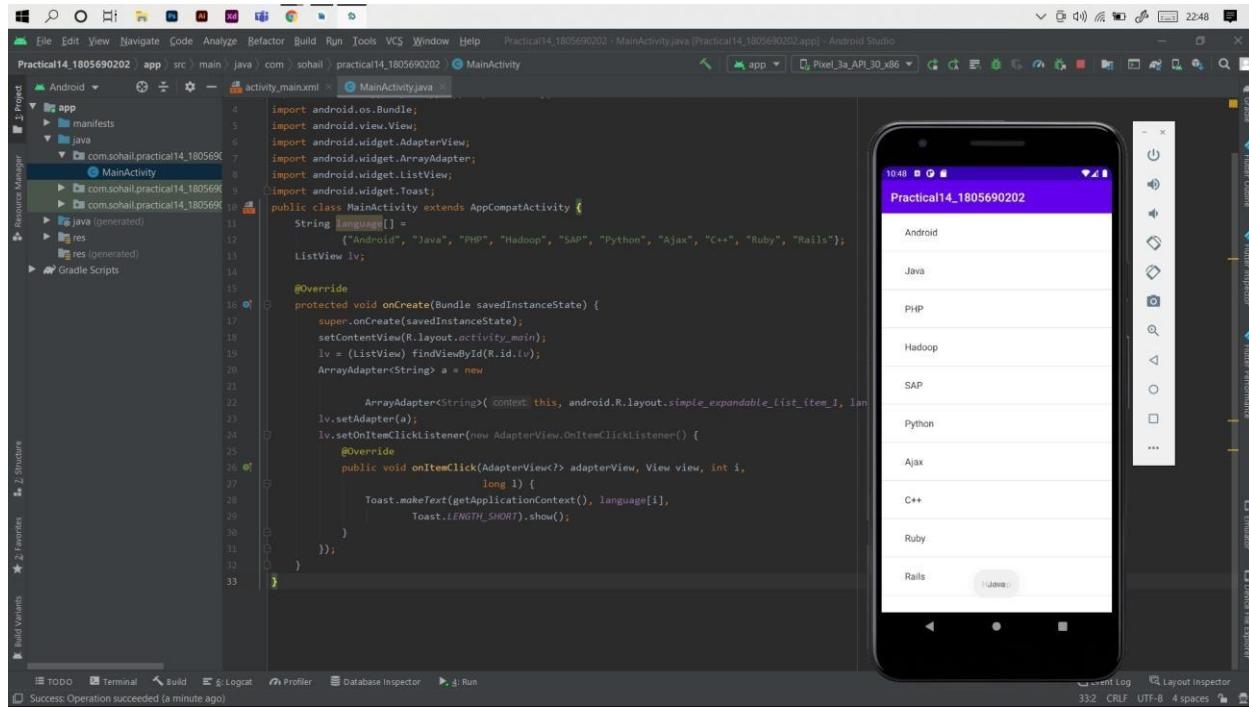
```

        i,
        long l) {
    Toast.makeText(getApplicationContext(),language[i],
    Toast.LENGTH_SHORT).show();
}
});
}

```

Output :





b) Write a program to display an image using Image View and a button named as “Change Image”. Once you click on button another image should get displayed.

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">

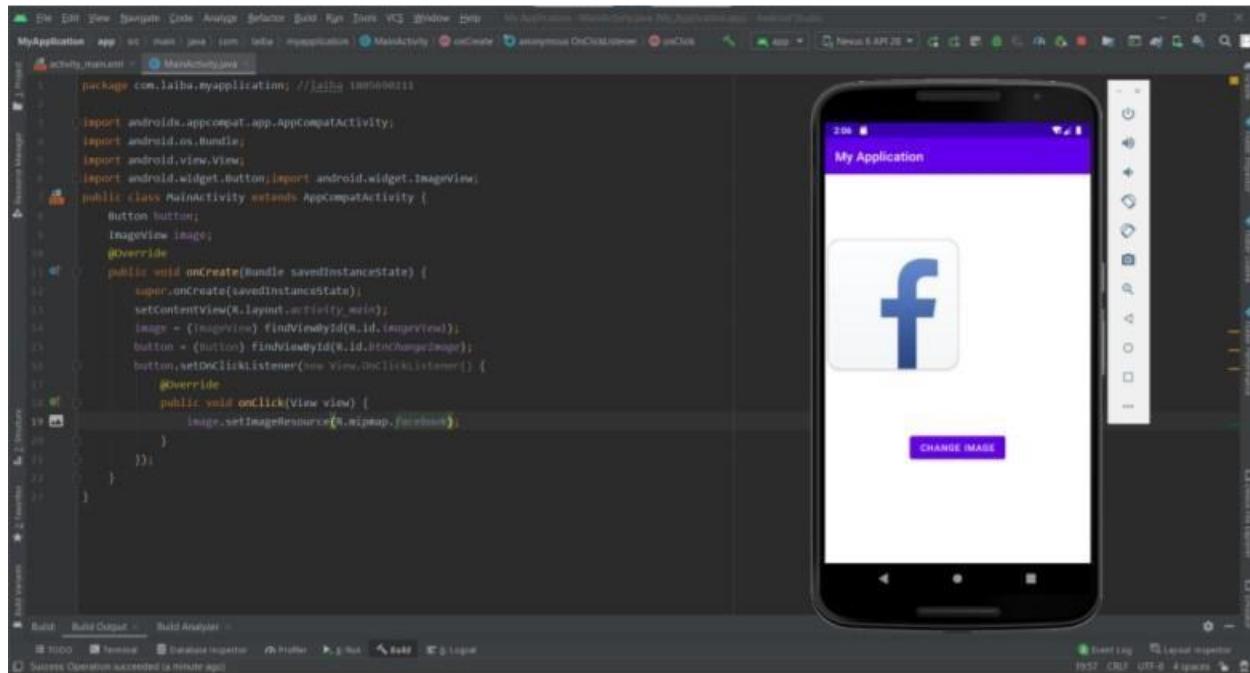
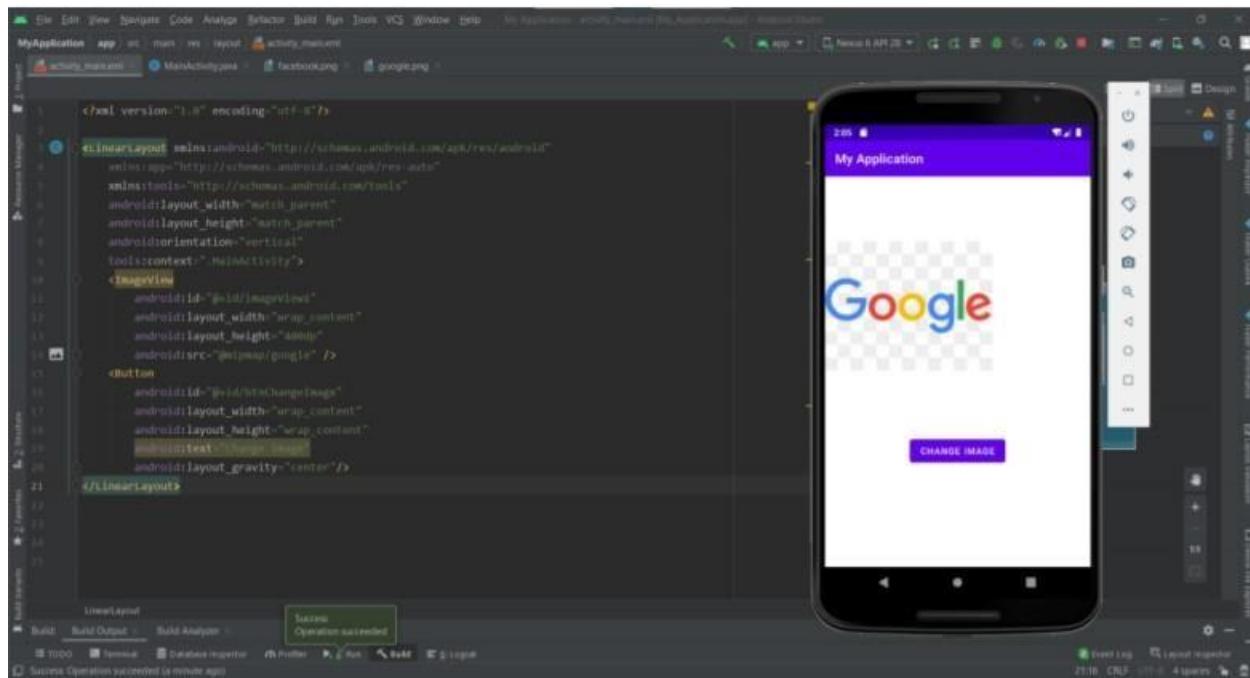
    <ImageView android:id="@+id/imageView1"
        android:layout_width="wrap_content"
        android:layout_height="400dp"
        android:src="@drawable/education1" />

    <Button
        android:id="@+id/btnChangeImage"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```

```
    android:text="Change Image"
    android:layout_gravity="center"/>
</LinearLayout> MainActivity.java package
com.sohail.practical14_1805690202;
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.Button; import android.widget.ImageView; public
class MainActivity extends AppCompatActivity {
    Button button;
    ImageView image; @Override public void
onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main); image =
    (ImageView) findViewById(R.id.imageView1); button =
    (Button) findViewById(R.id.btnChangeImage);
    button.setOnClickListener(new View.OnClickListener() {
        @Override public void onClick(View view) {
            image.setImageResource(R.drawable.education1);
        }
    });
}
}

Output :
```



c) Write a program to display 15 buttons using grid view activity_main.xml

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

```
<GridView android:id="@+id/gridView"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:verticalSpacing="10dp"
    android:horizontalSpacing="10dp"
    android:numColumns="2"/>

</androidx.constraintlayout.widget.ConstraintLayout> grid_item.xml

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent" android:orientation="vertical">

    <TextView android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="10dp"
        android:layout_marginTop="5dp"
        android:layout_marginRight="10dp"
        android:background="?attr/colorButtonNormal"
        android:textAlignment="center"
        android:padding="8dp"
        android:textColor="#000000"
        android:textStyle="bold"
        android:gravity="center_horizontal" />

</LinearLayout> MainActivity.java package
com.sohail.practical14_1805690202;

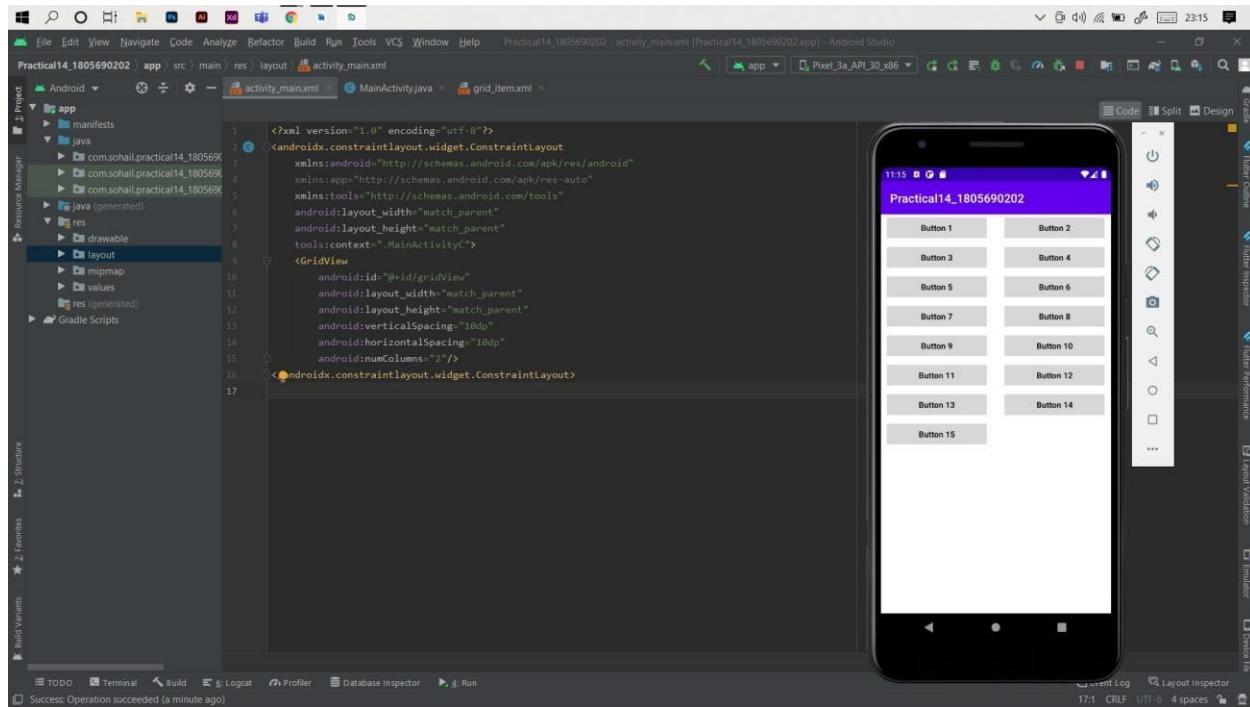
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.View; import android.widget.AdapterView; import android.widget.ArrayAdapter; import
android.widget.Button; import android.widget.GridView; import android.widget.TextView; import
android.widget.Toast; public class MainActivityC extends AppCompatActivity {

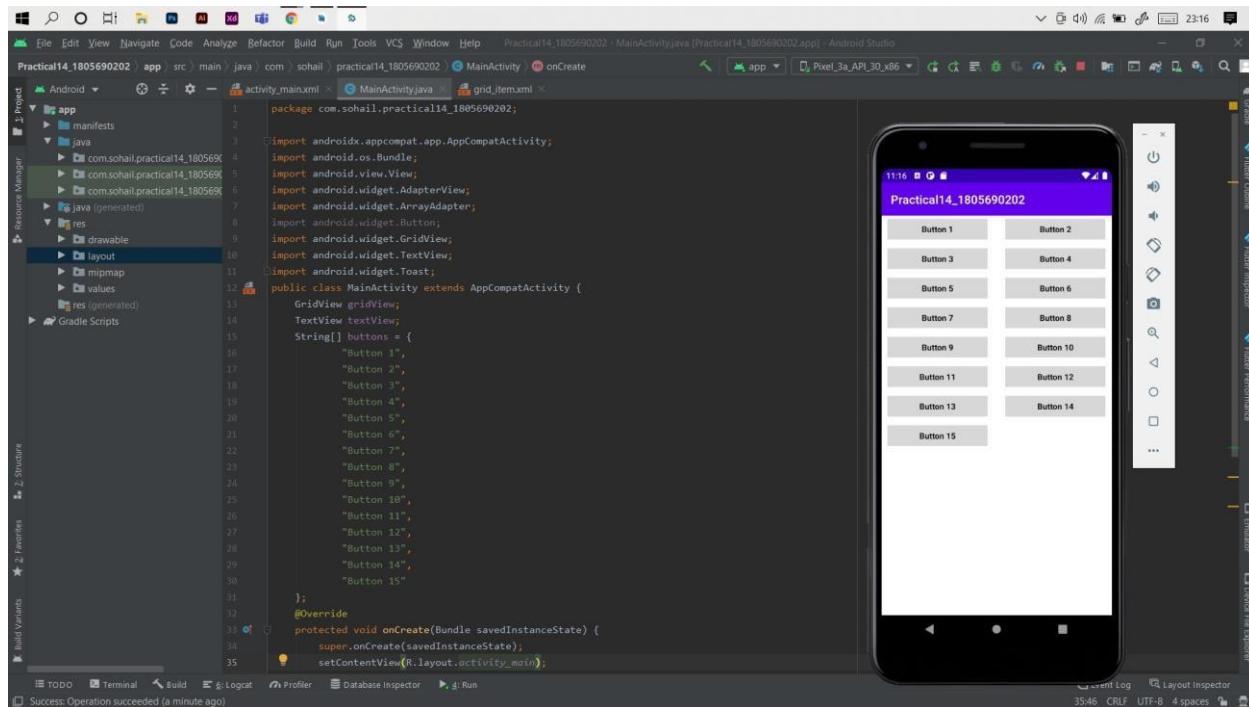
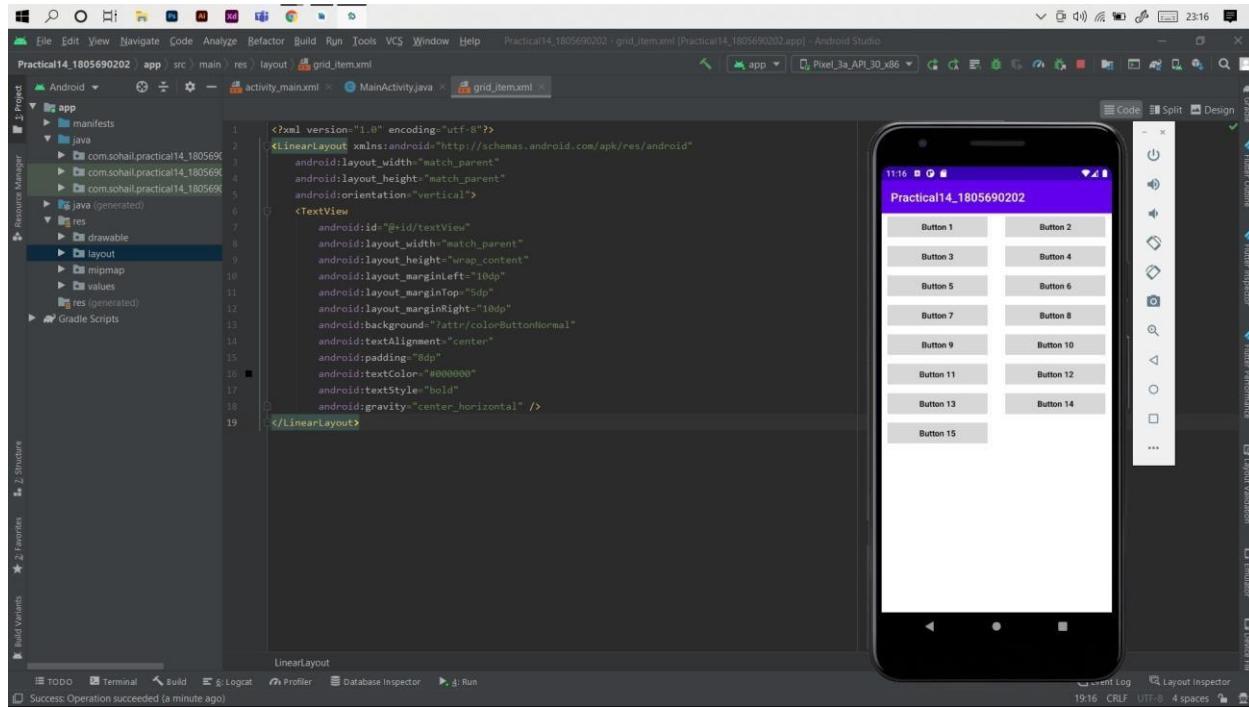
    GridView gridView;
    TextView textView;
```

```
String[] buttons = {  
    "Button 1",  
    "Button 2",  
    "Button 3",  
    "Button 4",  
    "Button 5",  
    "Button 6",  
    "Button 7",  
    "Button 8",  
    "Button 9",  
    "Button 10",  
    "Button 11",  
    "Button 12",  
    "Button 13",  
    "Button 14",  
    "Button 15"  
};  
  
@Override protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_main); gridView =  
        (GridView) findViewById(R.id.gridView); textView = (TextView)  
        findViewById(R.id.textView); final ArrayAdapter adapter = new  
        ArrayAdapter(this, R.layout.grid_item, R.id.textView, buttons);  
    gridView.setAdapter(adapter); gridView.setOnItemClickListener(new  
        AdapterView.OnItemClickListener() {  
            @Override public void onItemClick(AdapterView<?> adapterView,  
                View view, int position, long l) {  
                String value = (String) adapter.getItem(position);  
                Toast.makeText(getApplicationContext(), value,
```

```
Toast.LENGTH_SHORT).show();  
}  
});  
}  
}  
}
```

Output :





d) Write a program to display a text view using vertical scroll view

Activity_main.xml

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

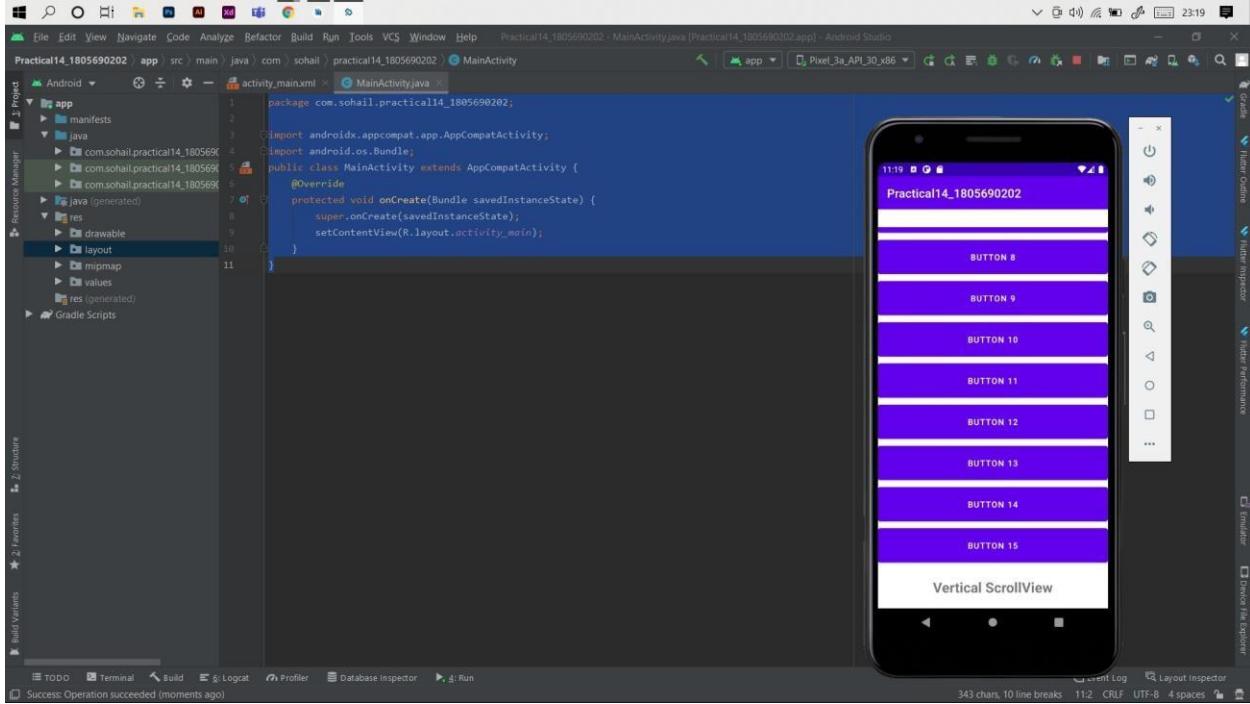
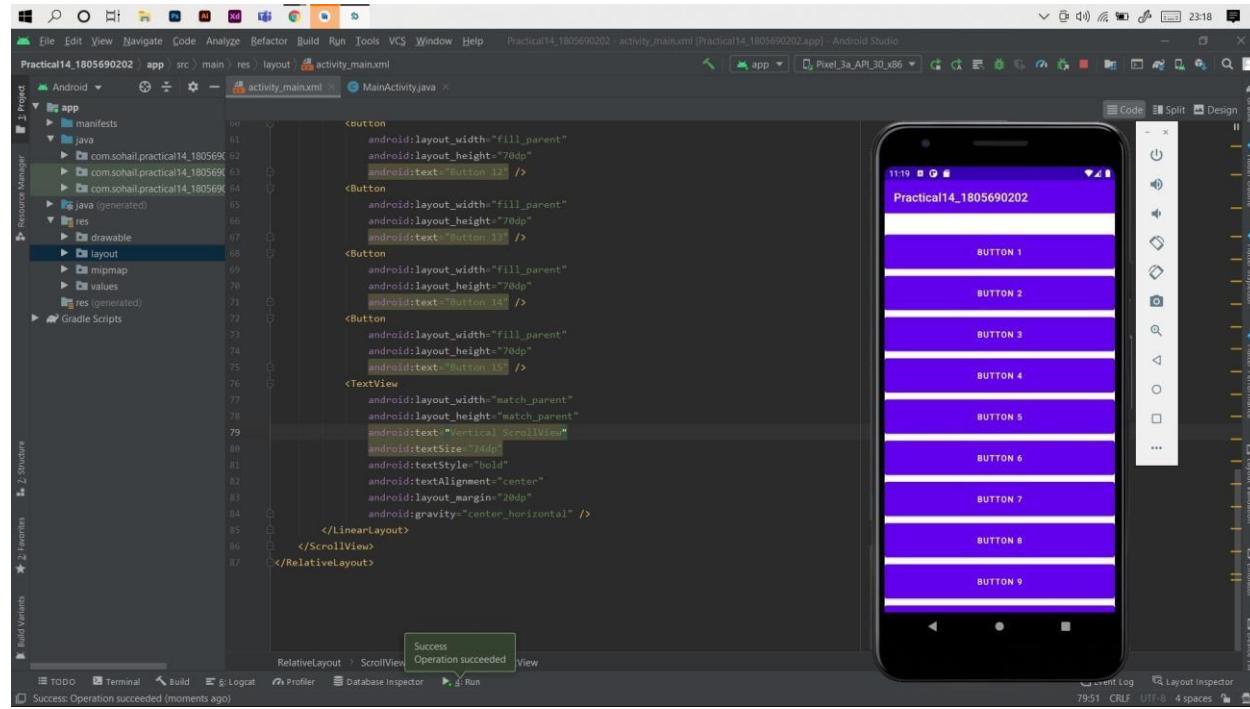
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools" android:layout_width="match_parent"
    android:layout_height="match_parent" tools:context=".MainActivity"> <ScrollView
```

```
    android:layout_marginTop="30dp" android:layout_width="fill_parent"
    android:layout_height="wrap_content" android:id="@+id/scrollView" > <LinearLayout
        android:layout_width="fill_parent" android:layout_height="fill_parent" android:orientation="vertical" >
        <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 1" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 2" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 3" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 4" />
        <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 5" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 6" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 7" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
            android:text="Button 8" /> <Button
            android:layout_width="fill_parent"
            android:layout_height="70dp"
```

```
    android:text="Button 9" /> <Button  
        android:layout_width="fill_parent"  
        android:layout_height="70dp"  
        android:text="Button 10" />  
  
    <Button  
        android:layout_width="fill_parent"  
        android:layout_height="70dp"  
        android:text="Button 11" />  
  
    <Button android:layout_width="fill_parent" android:layout_height="70dp" android:text="Button 12" />  
    <Button android:layout_width="fill_parent" android:layout_height="70dp" android:text="Button 13" />  
    <Button android:layout_width="fill_parent" android:layout_height="70dp" android:text="Button 14" />  
    <Button android:layout_width="fill_parent" android:layout_height="70dp" android:text="Button 15" />  
  
<TextView android:layout_width="match_parent" android:layout_height="match_parent"  
        android:text="Vertical ScrollView" android:textSize="24dp" android:textStyle="bold"  
        android:textAlignment="center" android:layout_margin="20dp" android:gravity="center_horizontal" />  
    </LinearLayout>  
    </ScrollView>  
</RelativeLayout> MainActivity.java package  
com.sohail.practical14_1805690202; 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);  
    }  
}
```

Output :



MAD Practicals
Khan Shahnawaz 1816080045

Practical No.15

a)

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" android:padding="20dp"
    tools:context=".MainActivity">
    <TextView android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World, Toast Example"/>
    <Button android:id="@+id/show"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Show Toast"/>
</LinearLayout>
```

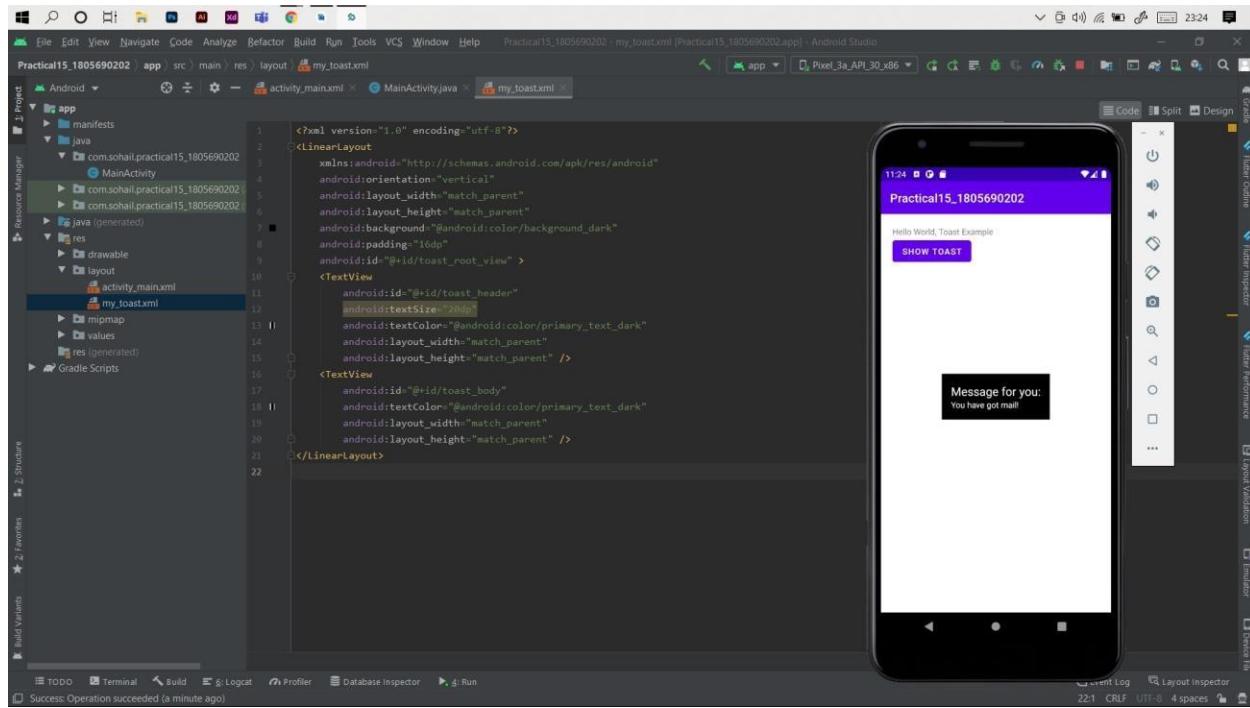
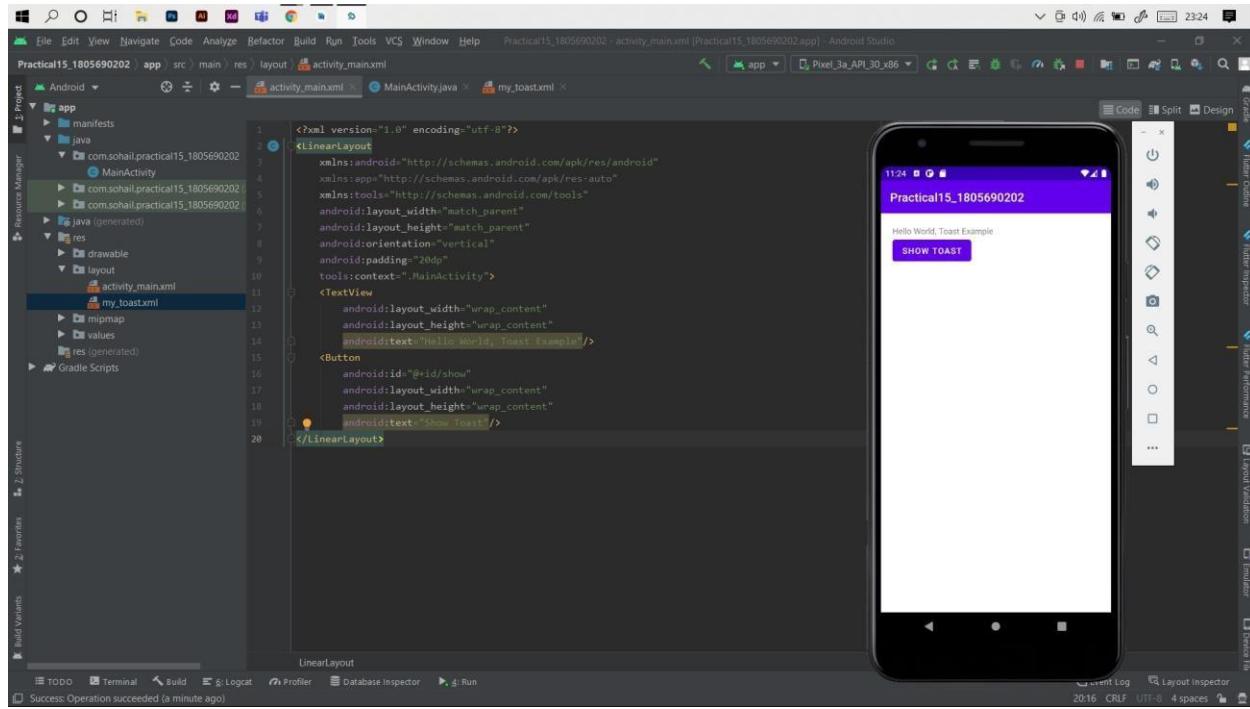
My_toast.xml

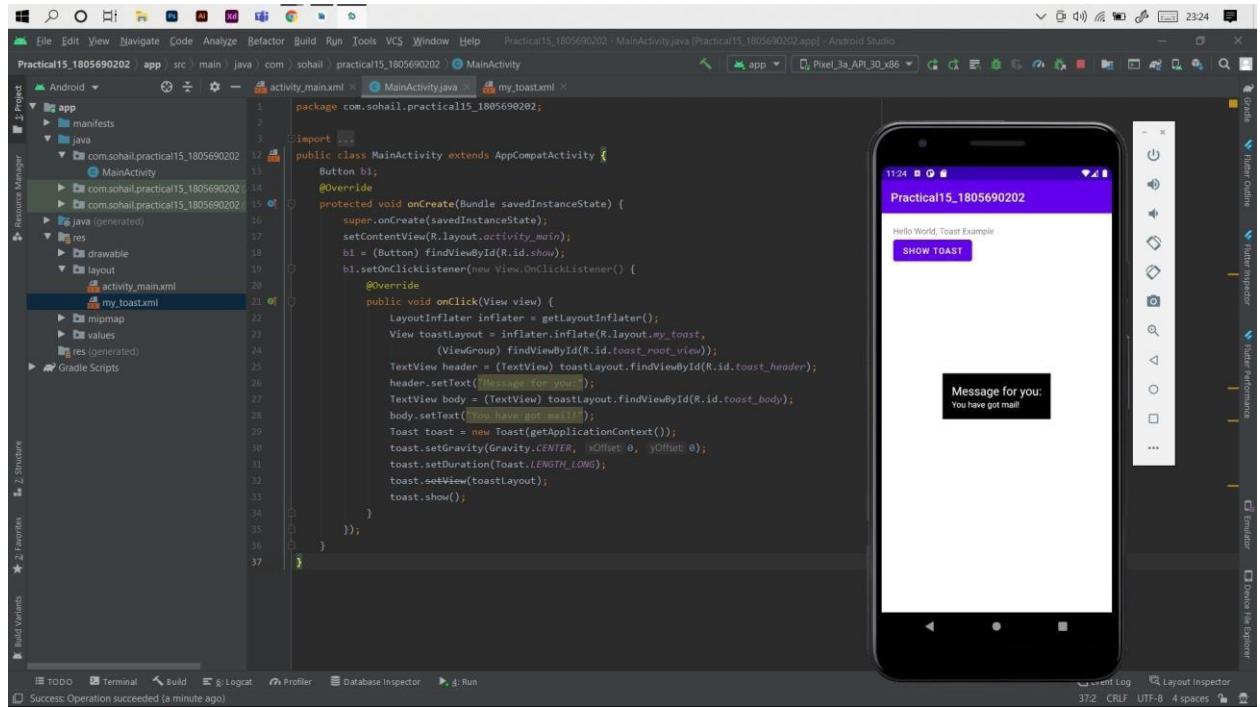
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical" android:layout_width="match_parent"
    android:layout_height="match_parent" android:background="@android:color/background_dark"
    android:padding="16dp" android:id="@+id/toast_root_view" >
    <TextView android:id="@+id/toast_header"
        android:textSize="20dp"
```

```
    android:textColor="@android:color/primary_text_dark"
    android:layout_width="match_parent"
    android:layout_height="match_parent" />
<TextView android:id="@+id/toast_body"
    android:textColor="@android:color/primary_text_dark"
    android:layout_width="match_parent" android:layout_height="match_parent" />
</LinearLayout> MainActivity.java package
com.sohail.practical15_1805690202;
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import
android.view.Gravity; import android.view.LayoutInflater; import android.view.View; import
android.view.ViewGroup; import android.widget.Button; import android.widget.TextView; import
android.widget.Toast; public class MainActivity extends AppCompatActivity {
    Button b1; @Override protected void
    onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1 = (Button) findViewById(R.id.show); b1.setOnClickListener(new
        View.OnClickListener() {
            @Override public void
            onClick(View view) {
                LayoutInflater inflater = getLayoutInflater();
                View toastLayout = inflater.inflate(R.layout.my_toast,
                (ViewGroup) findViewById(R.id.toast_root_view));
                TextView header = (TextView)
                toastLayout.findViewById(R.id.toast_header);
                header.setText("Message for you:");
                TextView
                body = (TextView)
                toastLayout.findViewById(R.id.toast_body);
                body.setText("You have got mail!"); Toast toast =
                new Toast(getApplicationContext());
                toast.setGravity(Gravity.CENTER, 0, 0);
            }
        });
    }
}
```

```
toast.setDuration(Toast.LENGTH_LONG);
toast.setView(toastLayout); toast.show();
}
});
}
}

Output :
```





b) Write a program to display three checkboxes and one button named "Order" as shown below. Once you click on button it should toast different selected checkboxes along with items individual and total price.

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" android:padding="20dp"
    tools:context=".MainActivity">

    <CheckBox android:id="@+id/checkBox"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="144dp"
        android:layout_marginTop="68dp"
        android:text="Pizza" /> <CheckBox
```

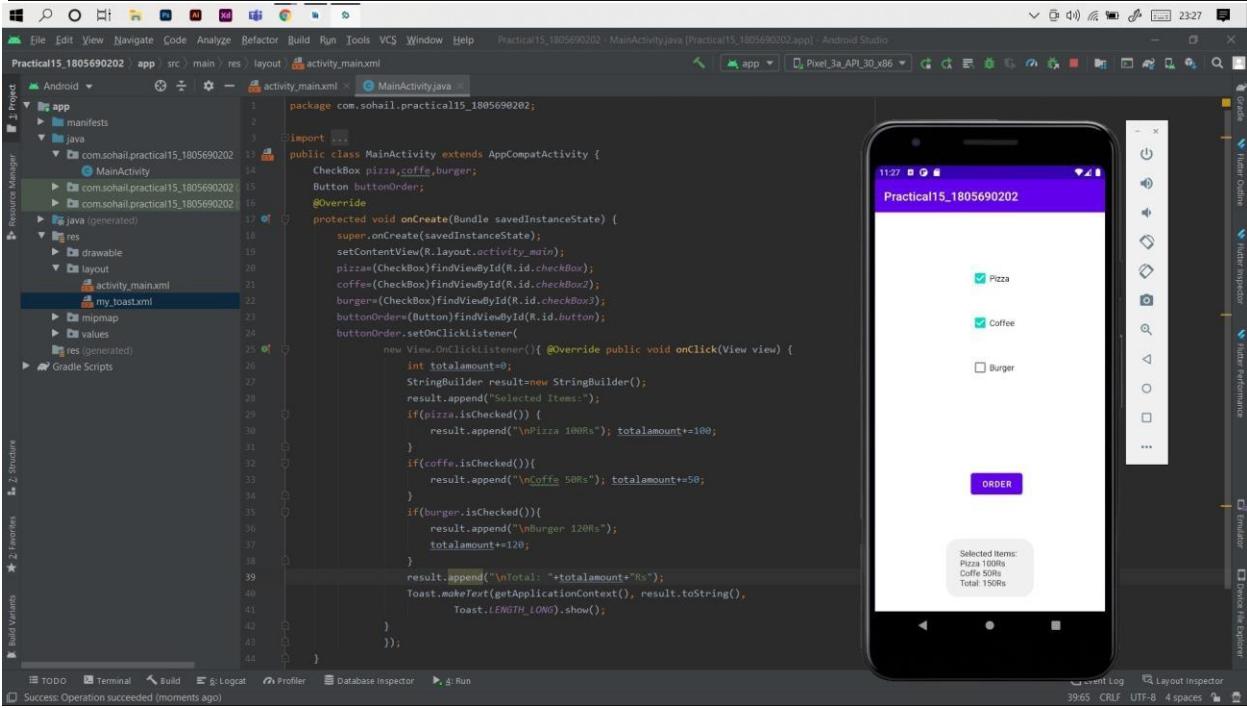
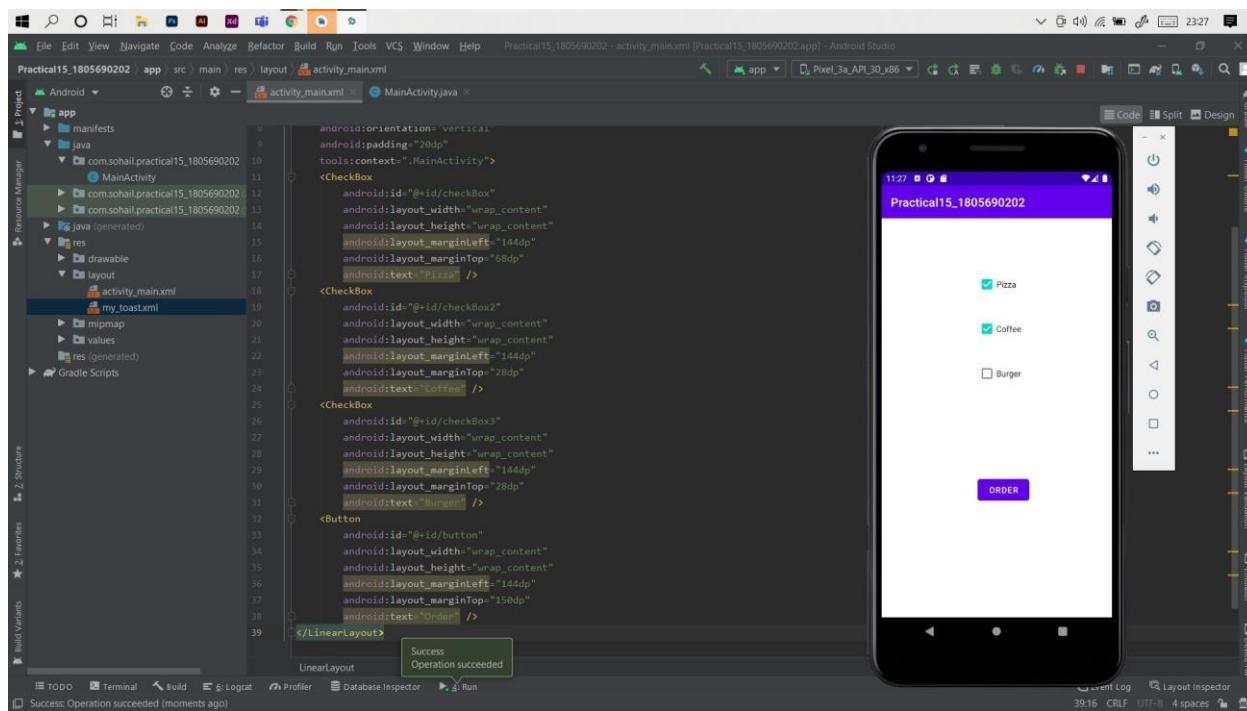
```
    android:id="@+id/checkBox2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="144dp"
    android:layout_marginTop="28dp"
    android:text="Coffee" /> <CheckBox
    android:id="@+id/checkBox3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="144dp"
    android:layout_marginTop="28dp"
    android:text="Burger" /> <Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="144dp"
    android:layout_marginTop="150dp"
    android:text="Order" />
</LinearLayout> MainActivity.java
package
com.sohail.practical15_1805690202;
import
androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import
android.view.Gravity;
import
android.view.LayoutInflater;
import
android.view.View;
import
android.view.ViewGroup;
import
android.widget.Button;
import
android.widget.CheckBox;
import
android.widget.TextView;
```

```
android.widget.Toast; public class
MainActivity extends
AppCompatActivity {
CheckBox pizza,coffe,burger;
Button buttonOrder; @Override protected void
onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
pizza=(CheckBox)findViewById(R.id.checkBox);
coffe=(CheckBox)findViewById(R.id.checkBox2);
burger=(CheckBox)findViewById(R.id.checkBox3);
buttonOrder=(Button)findViewById(R.id.button);
buttonOrder.setOnClickListener( new View.OnClickListener(){
@Override public void onClick(View view) { int totalamount=0;
StringBuilder result=new StringBuilder();
result.append("Selected Items:");
if(pizza.isChecked()) { result.append("\nPizza
100Rs"); totalamount+=100;
}
if(coffe.isChecked()){ result.append("\nCoffe
50Rs"); totalamount+=50;
}
if(burger.isChecked()){ result.append("\nBurger
120Rs"); totalamount+=120;
}
result.append("\nTotal: "+totalamount+"Rs");
Toast.makeText(getApplicationContext(), result.toString(),
Toast.LENGTH_LONG).show();
}
});
});
```

```
}
```

```
}
```

Output :



MAD Practicals
Khan Shahnawaz 1816080045

Practical No.16

a) Write a program to display TimePicker with Spinnermode

Activity_main.xml

```
<?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"
    tools:context=".MainActivity">
    <TimePicker android:id="@+id/timePicker1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="20dp"
        android:timePickerMode="spinner" />
    <Button android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/timePicker1"
        android:layout_marginTop="10dp"
        android:layout_marginLeft="160dp"
        android:text="Get Time" />
    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/button1"
        android:layout_marginLeft="120dp"
```

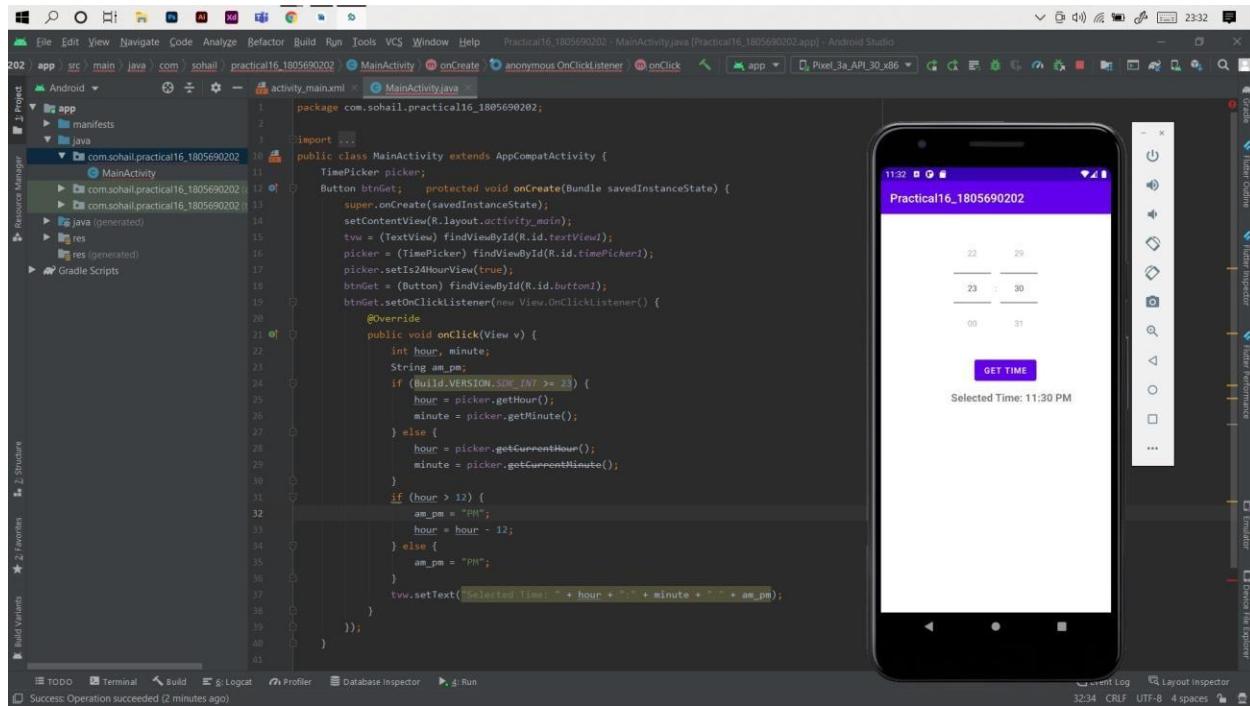
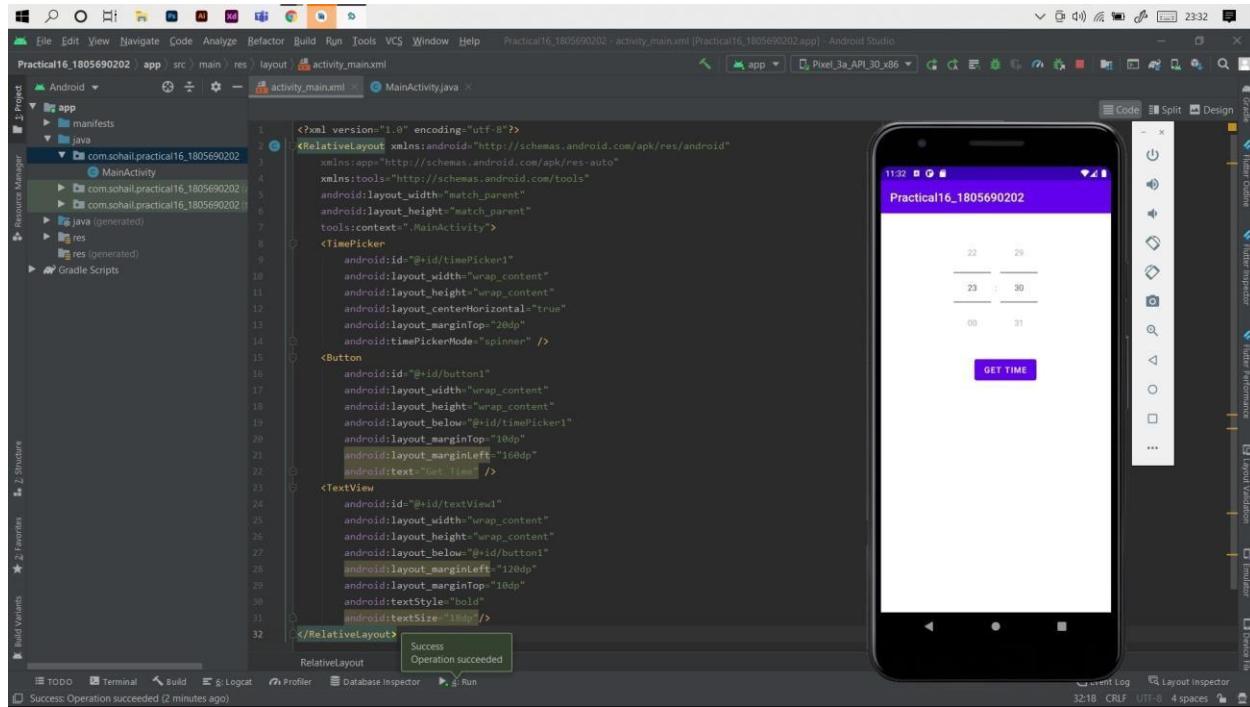
```
    android:layout_marginTop="10dp"
    android:textStyle="bold" android:textSize="18dp"/>
</RelativeLayout> MainActivity.java
:
package com.sohail.practical16_1805690202;

import androidx.appcompat.app.AppCompatActivity; import android.os.Build; import
android.os.Bundle; import android.view.View; import android.widget.Button; import
android.widget.TextView; import android.widget.TimePicker; public class
MainActivity extends AppCompatActivity {

    TimePicker picker;
    Button btnGet;
    TextView tvw; @Override protected void
    onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main); tvw =
        (TextView) findViewById(R.id.textView1); picker =
        (TimePicker) findViewById(R.id.timePicker1);
        picker.setIs24HourView(true); btnGet = (Button)
        findViewById(R.id.button1);
        btnGet.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int hour, minute; String am_pm; if
                (Build.VERSION.SDK_INT >= 23) {
                    hour = picker.getHour(); minute =
                    picker.getMinute();
                } else {
                    hour = picker.getCurrentHour(); minute
                    = picker.getCurrentMinute();
                }
                if (hour > 12) {
```

```
am_pm = "PM";
hour = hour - 12;
} else {
am_pm = "PM";
}
tvw.setText("Selected Time: " + hour + ":" + minute + " " + am_pm);
}
});
}
}

Output :
```



c) Write a program to display following output. Select and display date and time on click of “select date”, “select time” buttons respectively.

Activity_main.xml

```
<?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" tools:context=".MainActivity">
    <EditText android:id="@+id/editText1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:layout_marginTop="150dp"
        android:ems="9" /> <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="150dp"
        android:layout_toRightOf="@+id/editText1"
        android:text="Select Date" />
    <EditText android:id="@+id/editText2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:layout_below="@+id/editText1"
        android:ems="9" /> <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/button1"
        android:layout_toRightOf="@+id/editTe
        xt2" android:text="Select Time" />
    <TextView android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/button2"
```

```
        android:layout_marginLeft="100dp"
        android:layout_marginTop="50dp"
        android:textStyle="bold"
        android:textSize="18dp"/>

    <TextView android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/textView1"
        android:layout_marginLeft="100dp"
        android:layout_marginTop="20dp"
        android:textStyle="bold"
        android:textSize="18dp"/> </RelativeLayout>

MainActivity.java package
com.sohail.practical16_1805690202;

import androidx.appcompat.app.AppCompatActivity; import android.app.DatePickerDialog; import
android.app.TimePickerDialog; import android.os.Build; import android.os.Bundle; import
android.text.InputType; import android.view.View; import android.widget.Button; import
android.widget.DatePicker; import android.widget.EditText; import android.widget.TextView; import
android.widget.TimePicker; import java.util.Calendar;
public class MainActivity extends AppCompatActivity {

    DatePickerDialog datepicker;
    TimePickerDialog timepicker;

EditText e1,e2;
Button b1,b2;

TextView tvw1,tvw2; @Override protected void
onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

//Select Date tvw1=(TextView)findViewById(R.id.textView1);
e1=(EditText) findViewById(R.id.editText1);
e1.setInputType(InputType.TYPE_NULL);
e1.setOnClickListener(new View.OnClickListener() {
```

```
@Override  
public void onClick(View v) { final Calendar cldr =  
    Calendar.getInstance(); int day =  
    cldr.get(Calendar.DAY_OF_MONTH); int month =  
    cldr.get(Calendar.MONTH); int year =  
    cldr.get(Calendar.YEAR); // date picker dialog  
    datepicker = new DatePickerDialog(MainActivity.this,  
        new DatePickerDialog.OnDateSetListener() {  
            @Override public void onDateSet(DatePicker  
                view, int year,  
                int  
                monthOfYear, int dayOfMonth) { e1.setText(dayOfMonth + "/" + (monthOfYear + 1)  
                    + "/"  
                    + year);  
            }  
        }, year, month, day); datepicker.show();  
    } );  
    b1=(Button)findViewById(R.id.button1); b1.setOnClickListener(new  
    View.OnClickListener() {  
        @Override  
        public void onClick(View v) { tvw1.setText("Selected  
Date: "+ e1.getText());  
        }  
    });  
    //Select Time tvw2=(TextView)findViewById(R.id.textView2);  
    e2=(EditText) findViewById(R.id.editText2);  
    e2.setInputType(InputType.TYPE_NULL);  
    e2.setOnClickListener(new View.OnClickListener() {  
        @Override
```

```
public void onClick(View v) { final Calendar
cldr = Calendar.getInstance(); int hour =
cldr.get(Calendar.HOUR_OF_DAY); int
minutes = cldr.get(Calendar.MINUTE);
// time picker dialog timepicker = new
TimePickerDialog(MainActivity.this, new
TimePickerDialog.OnTimeSetListener() {
@Override
public void onTimeSet(TimePicker tp, int sHour, int
sMinute) { e2.setText(sHour + ":" + sMinute);
}
}, hour, minutes, true); timepicker.show();
} });
b2=(Button)findViewById(R.id.button2); b2.setOnClickListener(new
View.OnClickListener() {
@Override
public void onClick(View v) { tvw2.setText("Selected
Time: "+ e2.getText());
}
});
}
}

Output :
```

activity_main.xml

```
<?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"
    tools:context=".MainActivity">
    <EditText
        android:id="@+id/editText1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:layout_marginTop="15dp"
        android:ems="9" />
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="15dp"
        android:layout_toRightOf="@+id/editText1"
        android:text="Select Date" />
    <EditText
        android:id="@+id/editText2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:layout_below="@+id/editText1"
        android:ems="9" />
    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toRightOf="@+id/button1"/>
</RelativeLayout>
```

MainActivity.java

```
package com.sohail.practical16_1805690202;

import androidx.appcompat.app.AppCompatActivity;
import android.app.DatePickerDialog;
import android.app.TimePickerDialog;
import android.os.Build;
import android.os.Bundle;
import android.text.InputType;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.TimePicker;
import java.util.Calendar;

public class MainActivity extends AppCompatActivity {
    DatePickerDialog datepicker;
    TimePickerDialog timepicker;
    EditText e1,e2;
    Button b1,b2;
    TextView tv1,tv2;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        //Select Date
        tv1=(TextView)findViewById(R.id.textView1);
        e1=(EditText) findViewById(R.id.editText1);
        e1.setInputType(InputType.TYPE_NULL);
        e1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                final Calendar cldr = Calendar.getInstance();
                int day = cldr.get(Calendar.DAY_OF_MONTH);
                int month = cldr.get(Calendar.MONTH);
```