1. **Odd Or Even**

**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:orientation="vertical"

tools:context=".MainActivity">

<TableRow

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/first"

/>

<EditText

android:id="@+id/eid2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:inputType="text"/>

</TableRow>

<TableRow

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<Button

android:id="@+id/btn1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="odd/even"/>

<TextView

android:id="@+id/eid3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/res"

/>

</TableRow>

</TableLayout>

**Strings.xml**

<resources>

<string name="app\_name">New App</string>

<string name="first">Enter the Number:</string>

<string name="res">Result:</string>

</resources>

**AndroidManifest.xml**

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

package="com.example.newapp">

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.NewApp"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>

**MainActivity.java**

package com.example.newapp;

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;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

Button b;

EditText e1;

TextView t1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

e1=findViewById(R.id.eid2);

t1=findViewById(R.id.eid3);

b=findViewById(R.id.btn1);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String val1=e1.getText().toString();

Integer a=Integer.parseInt(val1);

t1.setText("The result is:");

if(a % 2 == 0)

t1.setText(a + " is even");

else

t1.setText(a+ " is odd");

//Toast.makeText(MainActivity.this, "The sum is:"+sum, Toast.LENGTH\_SHORT).show();

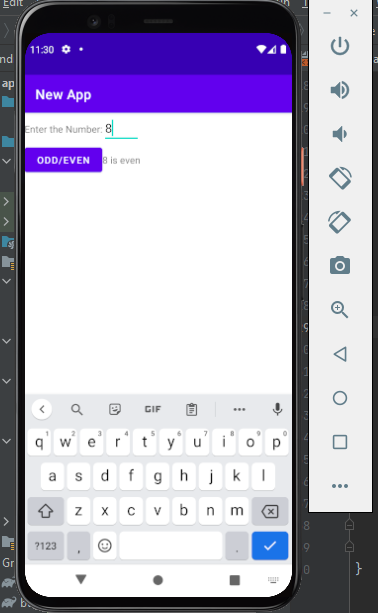
}

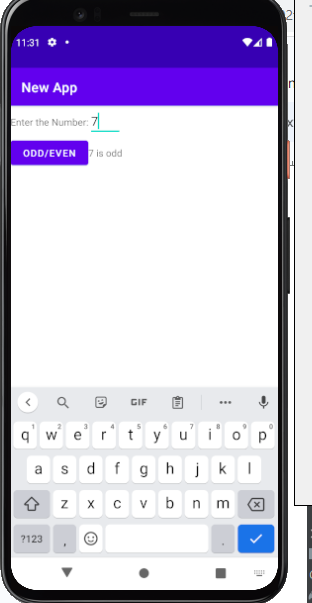
});

}

}

**Output**





**2. Login Form**

**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="@string/name" />

<EditText

android:id="@+id/user"

android:layout\_width="311dp"

android:layout\_height="wrap\_content"

android:hint="user" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/psw"

/>

<EditText

android:id="@+id/pass"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:hint="\*\*\*\*"

android:inputType="textPassword" />

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Login" />

</LinearLayout>

**Strings.xml**

<resources>

<string name="app\_name">Login</string>

<string name="name">username: </string>

<string name="psw">Password: </string>

</resources>

**Mainactivity.java**

package com.example.myapplication;

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;

public class MainActivity extends AppCompatActivity {

Button b;

EditText ed1, ed2;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ed1 = findViewById(R.id.user);

ed2 = findViewById(R.id.pass);

b = findViewById(R.id.btn);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String txt1 = ed1.getText().toString().trim();

String txt2 = ed2.getText().toString().trim();

if(txt1.isEmpty() || txt2.isEmpty()){

Toast.makeText(MainActivity.this, "Please enter Username and Password", Toast.LENGTH\_SHORT).show();

}

else if(txt1.equals("Rijul") || txt2.equals("root")) {

Toast.makeText(MainActivity.this, "Login Successful", Toast.LENGTH\_LONG).show();

}

else{

Toast.makeText(MainActivity.this, "Login Failed", Toast.LENGTH\_SHORT).show();

}

}

});

}

}

**Manifest.xml**

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

package="com.example.myapplication">

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.MyApplication"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

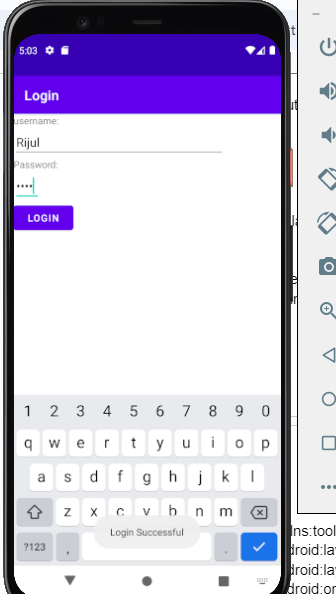
</intent-filter>

</activity>

</application>

</manifest>

**Output**



**3. Calculator**

<?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

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/num1"

/>

<EditText

android:id="@+id/num1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

/>

</TableRow>

<TableRow

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/num2"

/>

<EditText

android:id="@+id/num2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

/>

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/plus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="+" />

<Button

android:id="@+id/minus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="-" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/star"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="\*" />

<Button

android:id="@+id/slash"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="/" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/equal"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="=" />

<Button

android:id="@+id/C"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="C" />

</TableRow>

<TableRow>

<TextView

android:id="@+id/res"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:text="Result: " />

</TableRow>

</TableLayout>

<resources>

<string name="app\_name">App Record</string>

<string name="num1">Enter the first number:</string>

<string name="num2">Enter the second number:</string>

<string name="res">Result: </string>

</resources>

package com.example.apprecord;

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 {

EditText ed1, ed2;

Button plus, minus, multiply, divide, clear, equal;

TextView result;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ed1 = findViewById(R.id.num1);

ed2 = findViewById(R.id.num2);

plus = findViewById(R.id.plus);

minus = findViewById(R.id.minus);

multiply = findViewById(R.id.star);

divide = findViewById(R.id.slash);

clear = findViewById(R.id.C);

equal = findViewById(R.id.equal);

result = findViewById(R.id.res);

plus.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

calculate('+');

}

});

minus.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

calculate('-');

}

});

multiply.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

calculate('\*');

}

});

divide.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

calculate('/');

}

});

clear.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

ed1.setText("");

ed2.setText("");

result.setText("Result: ");

}

});

equal.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

calculate('=');

}

});

}

private void calculate(char operator) {

String num1Str = ed1.getText().toString();

String num2Str = ed2.getText().toString();

if (num1Str.isEmpty() || num2Str.isEmpty()) {

result.setText("Result: Please enter both numbers.");

return;

}

double num1 = Double.parseDouble(num1Str);

double num2 = Double.parseDouble(num2Str);

double resultValue = 0.0;

switch (operator) {

case '+':

resultValue = num1 + num2;

break;

case '-':

resultValue = num1 - num2;

break;

case '\*':

resultValue = num1 \* num2;

break;

case '/':

if (num2 == 0) {

result.setText("Result: Cannot divide by zero.");

return;

}

resultValue = num1 / num2;

break;

case '=':

break;

}

result.setText("Result: " + resultValue);

}

}

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

package="com.example.apprecord">

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.AppRecord"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

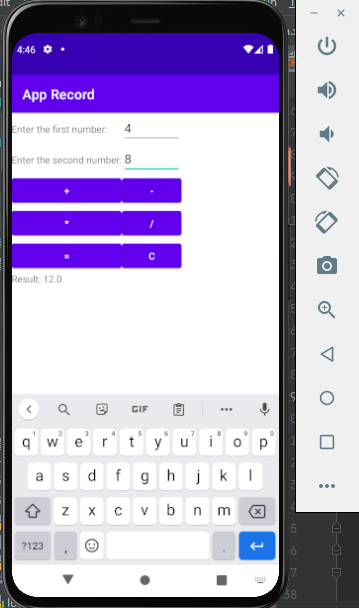
</intent-filter>

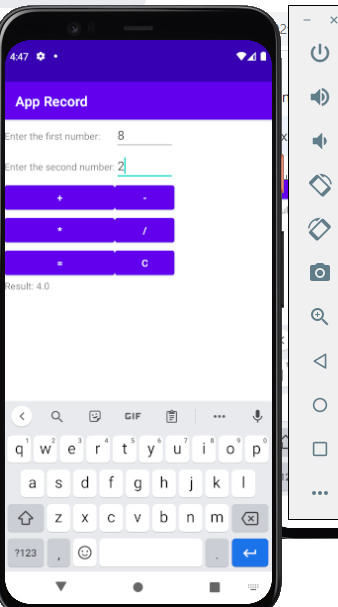
</activity>

</application>

</manifest>

**Output**





**4. . Write a program to display following output using 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

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/name" />

<EditText

android:id="@+id/user"

android:layout\_width="311dp"

android:layout\_height="wrap\_content"

android:hint="user" />

</TableRow>

<TableRow

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/psw"

/>

<EditText

android:id="@+id/pass"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:hint="\*\*\*\*"

android:inputType="textPassword" />

</TableRow>

<TableRow

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content">

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

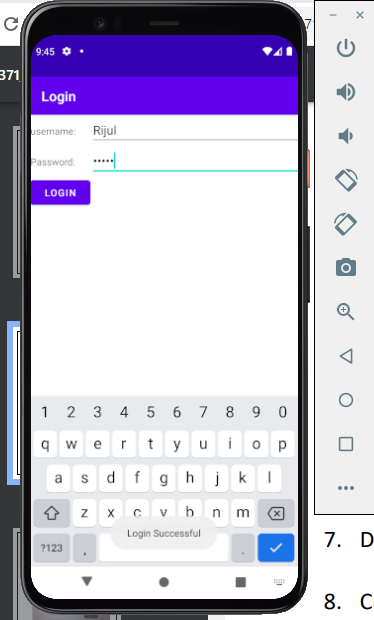
android:layout\_height="wrap\_content"

android:text="Login" />

</TableRow>

</TableLayout>

**Output**

****

**5. ActivityLifeCycle**

**ActivityMain.java**

**package com.example.activitylifecycle;**

**import androidx.appcompat.app.AppCompatActivity;**

**import android.os.Bundle;**

**import android.util.Log;**

**public class MainActivity extends AppCompatActivity {**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_main);**

**Log.d("lifecycle","onCreate invoked");**

**}**

**@Override**

**protected void onStart()**

**{**

**super.onStart();**

**Log.d("lifecycle","onStart invoked");**

**}**

**@Override**

**protected void onResume()**

**{**

**super.onResume();**

**Log.d("lifecycle","onResume invoked");**

**}**

**@Override**

**protected void onPause()**

**{**

**super.onPause();**

**Log.d("lifecycle","onPause invoked");**

**}**

**@Override**

**protected void onStop()**

**{**

**super.onStop();**

**Log.d("lifecycle","onStop invoked");**

**}**

**@Override**

**protected void onRestart()**

**{**

**super.onRestart();**

**Log.d("lifecycle","onRestart invoked");**

**}**

**@Override**

**protected void onDestroy()**

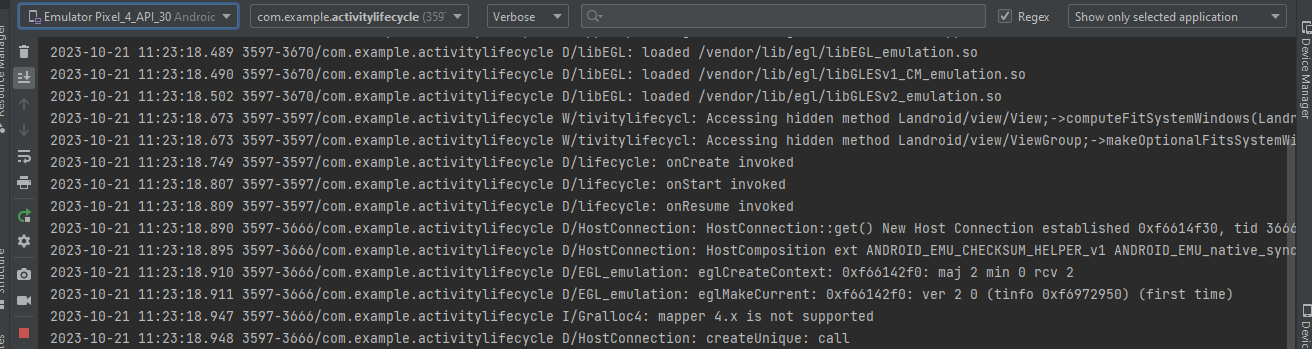
**{**

**super.onDestroy();**

**Log.d("lifecycle","onDestroy invoked");**

**}**

**}**

****

**6. Armstrong**

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

**<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:app="http://schemas.android.com/apk/res-auto"**

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity">**

**<TextView**

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

**android:layout\_width="287dp"**

**android:layout\_height="30dp"**

**android:text="Check a number is Amstrong or Not..!"**

**android:textAlignment="center"**

**android:textColor="#0426DD"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**tools:layout\_editor\_absoluteY="46dp"**

**tools:ignore="MissingConstraints" />**

**<Button**

**android:id="@+id/b1"**

**android:layout\_width="136dp"**

**android:layout\_height="41dp"**

**android:text="Check"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintHorizontal\_bias="0.243"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"**

**app:layout\_constraintVertical\_bias="0.298" />**

**<Button**

**android:id="@+id/button2"**

**android:layout\_width="137dp"**

**android:layout\_height="39dp"**

**android:text="Reset"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintHorizontal\_bias="0.806"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"**

**app:layout\_constraintVertical\_bias="0.297" />**

**<EditText**

**android:id="@+id/mynum"**

**style="@style/Widget.Material3.AutoCompleteTextView.FilledBox"**

**android:layout\_width="291dp"**

**android:layout\_height="55dp"**

**android:layout\_marginTop="108dp"**

**android:background="#ECECEC"**

**android:ems="10"**

**android:inputType="textPersonName"**

**android:selectAllOnFocus="false"**

**android:singleLine="false"**

**android:textAllCaps="false"**

**android:textAppearance="@style/TextAppearance.AppCompat.Medium"**

**android:textColor="#978A8A"**

**android:textStyle="italic"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent" />**

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

**package com.example.armstrong;**

**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;**

**public class MainActivity extends AppCompatActivity {**

**EditText mynum;**

**Button b1;**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_main);**

**mynum = findViewById(R.id.mynum);**

**b1 = findViewById(R.id.b1);**

**b1.setOnClickListener(new View.OnClickListener() {**

**@Override**

**public void onClick(View view) {**

**String n = mynum.getText().toString();**

**int num = Integer.parseInt(n);**

**int originalNum, remainder, result = 0;**

**originalNum = num;**

**while (originalNum != 0) {**

**remainder = originalNum % 10;**

**result += Math.pow(remainder, 3);**

**originalNum /= 10;**

**}**

**if (result == num) {**

**Toast.makeText(MainActivity.this, num + " is an Armstrong number", Toast.LENGTH\_SHORT).show();**

**} else {**

**Toast.makeText(MainActivity.this, num + " is not an Armstrong number", Toast.LENGTH\_SHORT).show();**

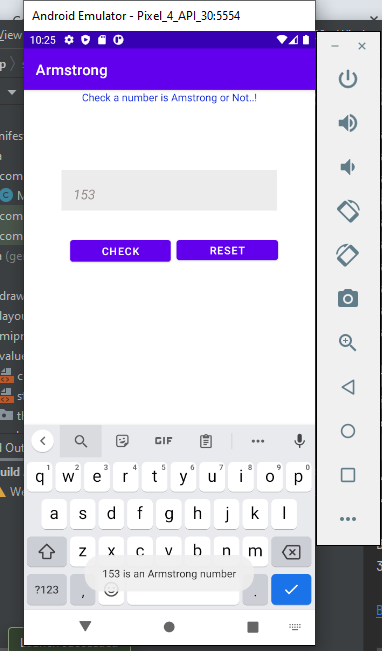
**}**

**}**

**});**

**}**

**}**



**7. Calculator(grid…)**

<?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

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="SIMPLE CALCULATOR"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Result"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<EditText

android:id="@+id/edit1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:inputType="text"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<Button

android:id="@+id/bseven"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="7"

/>

<Button

android:id="@+id/beight"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="8"

/>

<Button

android:id="@+id/bnine"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="9"

/>

<Button

android:id="@+id/bdiv"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="/"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<Button

android:id="@+id/bfour"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="4"

/>

<Button

android:id="@+id/bfive"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="5"

/>

<Button

android:id="@+id/bsix"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="6"

/>

<Button

android:id="@+id/bmultiply"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="\*"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<Button

android:id="@+id/bone"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="1"

/>

<Button

android:id="@+id/btwo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="2"

/>

<Button

android:id="@+id/bthree"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="3"

/>

<Button

android:id="@+id/bsub"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="-"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<Button

android:id="@+id/bdot"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="."

/>

<Button

android:id="@+id/bzero"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="0"

/>

<Button

android:id="@+id/bequal"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="="

/>

<Button

android:id="@+id/badd"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="+"

/>

</TableRow>

<TableRow

android:layout\_height="wrap\_content"

android:layout\_width="wrap\_content">

<Button

android:id="@+id/bclear"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="C"

/>

</TableRow>

</TableLayout>

package com.example.calculatorgrid;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

double input1=0, input2=0;

boolean Addition, Subtract, Multiplication, Division, decimal;

Button b0,b1, b2, b3, b4,b5,b6,b7,b8,b9,bc,beq,bdott,bdivision,bplus,bminus,bproduct;

EditText e1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

e1 = findViewById(R.id.edit1);

b0 = findViewById(R.id.bzero);

b1 = findViewById(R.id.bone);

b2 = findViewById(R.id.btwo);

b3 = findViewById(R.id.bthree);

b4 = findViewById(R.id.bfour);

b5 = findViewById(R.id.bfive);

b6 = findViewById(R.id.bsix);

b7 = findViewById(R.id.bseven);

b8 = findViewById(R.id.beight);

b9 = findViewById(R.id.bnine);

bdivision = findViewById(R.id.bdiv);

bproduct = findViewById(R.id.bmultiply);

bminus = findViewById(R.id.bsub);

bplus = findViewById(R.id.badd);

bc = findViewById(R.id.bclear);

bdott = findViewById(R.id.bdot);

beq = findViewById(R.id.bequal);

b0.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"0");

}

});

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"1");

}

});

b2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"2");

}

});

b3.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"3");

}

});

b4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"4");

}

});

b5.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"5");

}

});

b6.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"6");

}

});

b7.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"7");

}

});

b8.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"8");

}

});

b9.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText(e1.getText()+"9");

}

});

bplus.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (e1.getText().length() != 0) {

input1 = Float.parseFloat(e1.getText() + "");

Addition = true;

decimal = false;

e1.setText(null);

}

}

});

bminus.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (e1.getText().length() != 0) {

input1 = Float.parseFloat(e1.getText() + "");

Subtract = true;

decimal = false;

e1.setText(null);

}

}

});

bproduct.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (e1.getText().length() != 0) {

input1 = Float.parseFloat(e1.getText() + "");

Multiplication = true;

decimal = false;

e1.setText(null);

}

}

});

bdivision.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (e1.getText().length() != 0) {

input1 = Float.parseFloat(e1.getText() + "");

Division = true;

decimal = false;

e1.setText(null);

}

}

});

beq.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (Addition || Subtract || Multiplication || Division ) {

input2 = Float.parseFloat(e1.getText() + "");

}

if (Addition) {

e1.setText(input1 + input2 + "");

Addition = false;

}

if (Subtract) {

e1.setText(input1 - input2 + "");

Subtract = false;

}

if (Multiplication) {

e1.setText(input1 \* input2 + "");

Multiplication = false;

}

if (Division) {

e1.setText(input1 / input2 + "");

Division = false;

}

}

});

bdott.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (decimal) {

//do nothing or you can show the error

} else {

e1.setText(e1.getText() + ".");

decimal = true;

}

}

});

bc.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

e1.setText("");

input1 = 0.0;

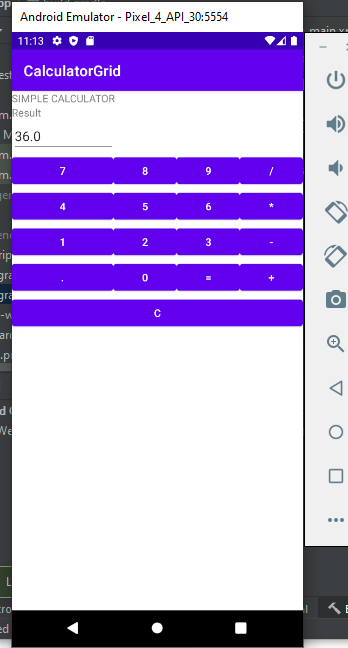
input2 = 0.0;

}

});

}

}



**7. Palindrome**

<?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">

<EditText

android:id="@+id/editTextNumber"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.104" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Check Palindrome"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/editTextNumber"

app:layout\_constraintVertical\_bias="0.051" />

<TextView

android:id="@+id/textViewResult"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text=""

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/button"

app:layout\_constraintVertical\_bias="0.077" />

</androidx.constraintlayout.widget.ConstraintLayout>

package com.example.palindrome;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

private Button b;

private EditText editTextNumber;

private TextView textViewResult;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

editTextNumber = findViewById(R.id.editTextNumber);

textViewResult = findViewById(R.id.textViewResult);

b = findViewById(R.id.button);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// Get the number from the EditText

String inputNumber = editTextNumber.getText().toString();

// Check if the input is not empty

if (!inputNumber.isEmpty()) {

// Check if the number is a palindrome

boolean isPalindrome = isPalindrome(inputNumber);

// Display the result

if (isPalindrome) {

textViewResult.setText("Palindrome!");

} else {

textViewResult.setText("Not a Palindrome!");

}

} else {

// Handle the case when the input is empty

textViewResult.setText("Please enter a number");

}

}

});

}

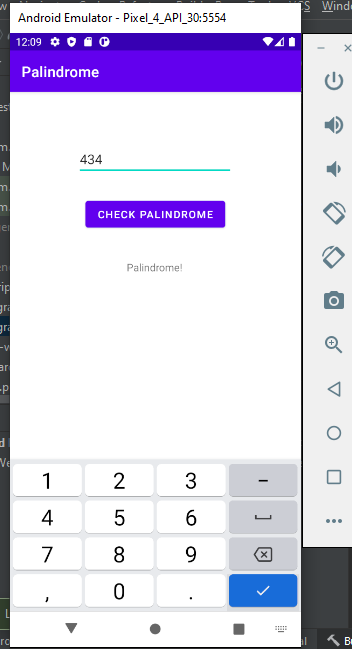
private boolean isPalindrome(@NonNull String number) {

// Compare the original string with its reverse

return number.equals(new StringBuilder(number).reverse().toString());

}

}



8. **SUM OF DIGITS**

**<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools"**

**android:id="@+id/activity\_main"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity">**

**<EditText**

**android:id="@+id/editTextNumber"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_centerHorizontal="true"**

**android:layout\_marginTop="32dp"**

**android:ems="10"**

**android:hint="@string/enter\_number"**

**android:inputType="number" />**

**<Button**

**android:id="@+id/buttonCalculate"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/editTextNumber"**

**android:layout\_centerHorizontal="true"**

**android:layout\_marginTop="16dp"**

**android:text="@string/calculate"**

**android:onClick="calculateSum" />**

**<TextView**

**android:id="@+id/textViewResult"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/buttonCalculate"**

**android:layout\_centerHorizontal="true"**

**android:layout\_marginTop="16dp"**

**android:text="@string/result" />**

**</RelativeLayout>**

**STRINGS.XML**

**<resources>**

**<string name="app\_name">Sumofdigits</string>**

**<string name="calculate">Calculate</string>**

**<string name="enter\_number">Enter number:</string>**

**<string name="result">Result:</string>**

**</resources>**

**MAINACTIVITY.JAVA**

**package com.example.sumofdigits;**

**import android.os.Bundle;**

**import android.view.View;**

**import android.widget.EditText;**

**import android.widget.TextView;**

**import androidx.appcompat.app.AppCompatActivity;**

**public class MainActivity extends AppCompatActivity {**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_main);**

**}**

**public void calculateSum(View view) {**

**EditText editText = findViewById(R.id.editTextNumber);**

**String numberString = editText.getText().toString();**

**int number = Integer.parseInt(numberString);**

**int sum = 0;**

**while (number > 0) {**

**sum += number % 10;**

**number /= 10;**

**}**

**TextView textView = findViewById(R.id.textViewResult);**

**textView.setText(String.valueOf(sum));**

**}**

**}**

**MAINIFEST.XML**

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

**<manifest xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools"**

**package="com.example.sumofdigits">**

**<application**

**android:allowBackup="true"**

**android:dataExtractionRules="@xml/data\_extraction\_rules"**

**android:fullBackupContent="@xml/backup\_rules"**

**android:icon="@mipmap/ic\_launcher"**

**android:label="@string/app\_name"**

**android:roundIcon="@mipmap/ic\_launcher\_round"**

**android:supportsRtl="true"**

**android:theme="@style/Theme.Sumofdigits"**

**tools:targetApi="31">**

**<activity**

**android:name=".MainActivity"**

**android:exported="true">**

**<intent-filter>**

**<action android:name="android.intent.action.MAIN" />**

**<category android:name="android.intent.category.LAUNCHER" />**

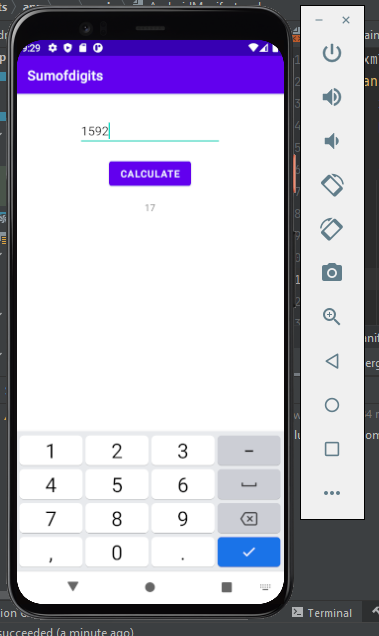
**</intent-filter>**

**</activity>**

**</application>**

**</manifest>**

**OUTPUT**

****

**9. REGISTRATION FORM**

**<?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">**

**<EditText**

**android:id="@+id/editTextName"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:hint="@string/name\_hint"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent" />**

**<EditText**

**android:id="@+id/editTextUsername"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:hint="@string/username\_hint"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@id/editTextName" />**

**<EditText**

**android:id="@+id/editTextPassword"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:hint="@string/password\_hint"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@id/editTextUsername" />**

**<EditText**

**android:id="@+id/editTextEmail"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:hint="@string/email\_hint"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@id/editTextPassword" />**

**<Button**

**android:id="@+id/btnSubmit"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="@string/submit\_button"**

**app:layout\_constraintTop\_toBottomOf="@id/editTextEmail"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintBottom\_toBottomOf="parent" />**

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

**STRINGS.XML**

**<resources>**

**<string name="app\_name">ApplicationForm</string>**

**<string name="name\_hint">Name</string>**

**<string name="username\_hint">Username</string>**

**<string name="password\_hint">Password</string>**

**<string name="email\_hint">Email</string>**

**<string name="submit\_button">Submit</string>**

**</resources>**

**MAINACTIVITY.JAVA**

**package com.example.applicationform;**

**import android.os.Bundle;**

**import android.view.View;**

**import android.widget.Button;**

**import android.widget.EditText;**

**import android.widget.Toast;**

**import androidx.appcompat.app.AppCompatActivity;**

**public class MainActivity extends AppCompatActivity {**

**private EditText editTextName, editTextUsername, editTextPassword, editTextEmail;**

**private Button btnSubmit;**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_main);**

**editTextName = findViewById(R.id.editTextName);**

**editTextUsername = findViewById(R.id.editTextUsername);**

**editTextPassword = findViewById(R.id.editTextPassword);**

**editTextEmail = findViewById(R.id.editTextEmail);**

**btnSubmit = findViewById(R.id.btnSubmit);**

**btnSubmit.setOnClickListener(new View.OnClickListener() {**

**@Override**

**public void onClick(View view) {**

**String name = editTextName.getText().toString();**

**String username = editTextUsername.getText().toString();**

**String password = editTextPassword.getText().toString();**

**String email = editTextEmail.getText().toString();**

**String message = "Name: " + name + "\nUsername: " + username + "\nPassword: " + password + "\nEmail: " + email;**

**Toast.makeText(getApplicationContext(), message, Toast.LENGTH\_LONG).show();**

**}**

**});**

**}**

**}**

**MAINFEST.XML**

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

**<manifest xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools"**

**package="com.example.applicationform">**

**<application**

**android:allowBackup="true"**

**android:dataExtractionRules="@xml/data\_extraction\_rules"**

**android:fullBackupContent="@xml/backup\_rules"**

**android:icon="@mipmap/ic\_launcher"**

**android:label="@string/app\_name"**

**android:roundIcon="@mipmap/ic\_launcher\_round"**

**android:supportsRtl="true"**

**android:theme="@style/Theme.ApplicationForm"**

**tools:targetApi="31">**

**<activity**

**android:name=".MainActivity"**

**android:exported="true">**

**<intent-filter>**

**<action android:name="android.intent.action.MAIN" />**

**<category android:name="android.intent.category.LAUNCHER" />**

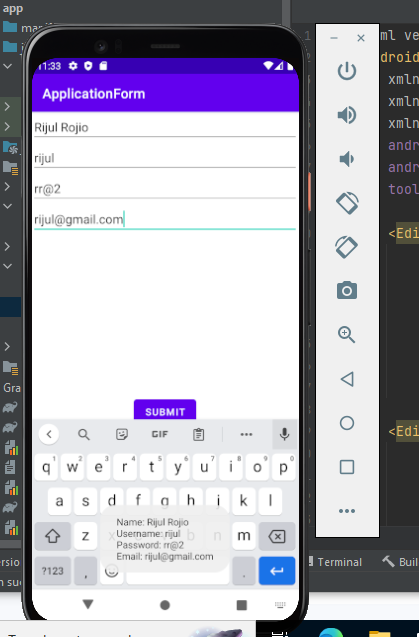
**</intent-filter>**

**</activity>**

**</application>**

**</manifest>**

**OUTPUT**

****

**10. Intents**

**package com.example.intents;**

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button b=findViewById(R.id.button);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Intent i=new Intent(Intent.ACTION\_VIEW, Uri.parse("https://mail.google.com/"));

startActivity(i);

}

});

}

}

**package com.example.intents;**

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button b=findViewById(R.id.button);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

//implicit Intent i=new Intent(Intent.ACTION\_VIEW, Uri.parse("https://mail.google.com/"));

//startActivity(i);

Intent i=new Intent(MainActivity.this,MainActivity2.class);

startActivity(i);

}

});

}

}

**package com.example.intents;**

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

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 {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

EditText ed1 = findViewById(R.id.user);

Button b=findViewById(R.id.btn);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

//implicit Intent i=new Intent(Intent.ACTION\_VIEW, Uri.parse("https://mail.google.com/"));

//startActivity(i);

//Intent i=new Intent(MainActivity.this,MainActivity2.class);

// startActivity(i);

String txt1 = ed1.getText().toString().trim();

if(txt1.isEmpty()){

Toast.makeText(MainActivity.this, "Please enter Username", Toast.LENGTH\_SHORT).show();

}

else {

Toast.makeText(MainActivity.this,txt1, Toast.LENGTH\_LONG).show();

}

Intent i=new Intent(MainActivity.this,MainActivity2.class);

i.putExtra("abc",txt1);

startActivity(i);

}

});

}

}

**package com.example.intents;**

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

TextView t = findViewById(R.id.textView2);

Intent i=getIntent();

String s=i.getStringExtra("abc");

t.setText("Username:"+s);

}

}

**<?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="@string/name" />

<EditText

android:id="@+id/user"

android:layout\_width="311dp"

android:layout\_height="wrap\_content"

android:hint="username" />

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Submit" />

</LinearLayout>

**<?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=".MainActivity2">

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

tools:layout\_editor\_absoluteX="130dp"

tools:layout\_editor\_absoluteY="195dp" />

</LinearLayout>

**<?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="@string/fn" />

<EditText

android:id="@+id/usr"

android:layout\_width="311dp"

android:layout\_height="wrap\_content"

android:hint="fname" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/name" />

<EditText

android:id="@+id/user"

android:layout\_width="311dp"

android:layout\_height="wrap\_content"

android:hint="username" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/psw"

/>

<EditText

android:id="@+id/pass"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:hint="\*\*\*\*"

android:inputType="textPassword" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/mail"

/>

<EditText

android:id="@+id/editTextEmail"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:hint="email"/>

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Submit" />

</LinearLayout>

**package com.example.intents;**

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

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 {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

EditText ed1 = findViewById(R.id.user);

EditText ed2=findViewById(R.id.usr);

EditText ed3=findViewById(R.id.pass);

EditText ed4=findViewById(R.id.editTextEmail);

Button b=findViewById(R.id.btn);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

//implicit Intent i=new Intent(Intent.ACTION\_VIEW, Uri.parse("https://mail.google.com/"));

//startActivity(i);

//Intent i=new Intent(MainActivity.this,MainActivity2.class);

// startActivity(i);

String txt1 = ed1.getText().toString().trim();

String txt2 = ed2.getText().toString().trim();

String txt3 = ed3.getText().toString().trim();

String txt4 = ed4.getText().toString().trim();

Toast.makeText(MainActivity.this,txt1, Toast.LENGTH\_LONG).show();

Toast.makeText(MainActivity.this,txt2, Toast.LENGTH\_LONG).show();

Toast.makeText(MainActivity.this,txt3, Toast.LENGTH\_LONG).show();

Toast.makeText(MainActivity.this,txt4, Toast.LENGTH\_LONG).show();

Intent i=new Intent(MainActivity.this,MainActivity2.class);

i.putExtra("abc",txt1);

i.putExtra("def",txt2);

i.putExtra("ghi",txt3);

i.putExtra("jkl",txt4);

startActivity(i);

}

});

}

}

**<?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=".MainActivity2">

<TextView

android:id="@+id/pass"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

tools:layout\_editor\_absoluteX="130dp"

tools:layout\_editor\_absoluteY="195dp" />

<TextView

android:id="@+id/usr"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

tools:layout\_editor\_absoluteX="130dp"

tools:layout\_editor\_absoluteY="195dp" />

<TextView

android:id="@+id/user"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

tools:layout\_editor\_absoluteX="130dp"

tools:layout\_editor\_absoluteY="195dp" />

<TextView

android:id="@+id/editTextEmail"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

tools:layout\_editor\_absoluteX="130dp"

tools:layout\_editor\_absoluteY="195dp" />

</LinearLayout>

**package com.example.intents;**

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

TextView t = findViewById(R.id.pass);

TextView o = findViewById(R.id.user);

TextView r = findViewById(R.id.usr);

TextView u = findViewById(R.id.editTextEmail);

Intent i=getIntent();

String s=i.getStringExtra("abc");

o.setText("name:"+s);

String s2=i.getStringExtra("def");

r.setText("Username:"+s2);

String s3=i.getStringExtra("ghi");

t.setText("password:"+s3);

String s4=i.getStringExtra("jkl");

u.setText("Email:"+s4);

}

}

<resources>

<string name="app\_name">Intents</string>

<string name="name">username: </string>

<string name="fn">Name:</string>

<string name="psw">Password:</string>

<string name="mail">EmailId:</string>

</resources>

**11. package com.example.framelayout;**

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ImageView i1=findViewById(R.id.imageView5);

ImageView i2=findViewById(R.id.imageView6);

i2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

i1.setVisibility(View.VISIBLE);

i2.setVisibility(View.GONE);

}

});

i1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

i2.setVisibility(View.VISIBLE);

i1.setVisibility(View.GONE);

}

});

}

}

<?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">

<ImageView

android:id="@+id/imageView5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:scaleType="fitXY"

app:srcCompat="@drawable/img" />

<ImageView

android:id="@+id/imageView6"

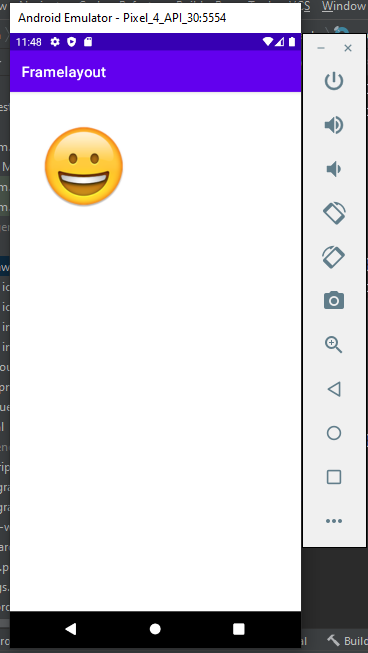
android:layout\_width="190dp"

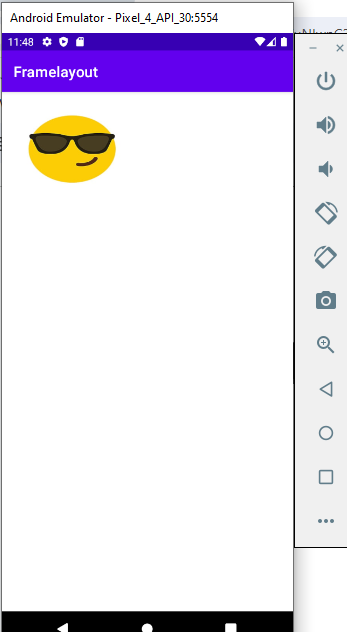
android:layout\_height="147dp"

android:scaleType="fitXY"

app:srcCompat="@drawable/img\_1" />

</FrameLayout>





12.

package com.example.co4;

import android.app.AlertDialog;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;

import android.content.DialogInterface;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

private Context context=this;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button b1=findViewById(R.id.button2);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

AlertDialog.Builder alert=new AlertDialog.Builder(context);

alert.setTitle("AlertBox");

alert.setMessage("Do You Want to Close").setPositiveButton("yes",new DialogInterface.OnClickListener()

{

@Override

public void onClick(DialogInterface dialogInterface, int i)

{

MainActivity.this.finish();

}

}).setNegativeButton("No", new DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialogInterface, int i) {

}

});

AlertDialog obj= alert.create();

obj.show();

}

});

}

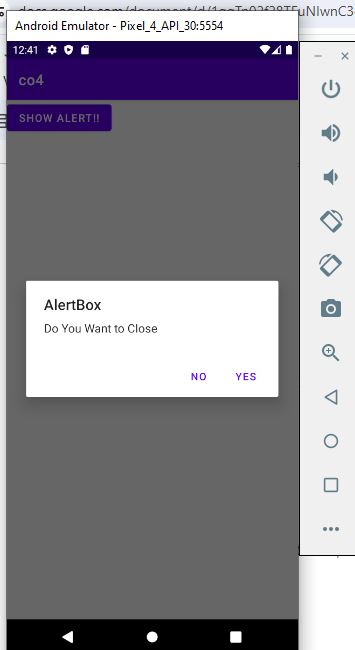
public void setC(Context c)

{

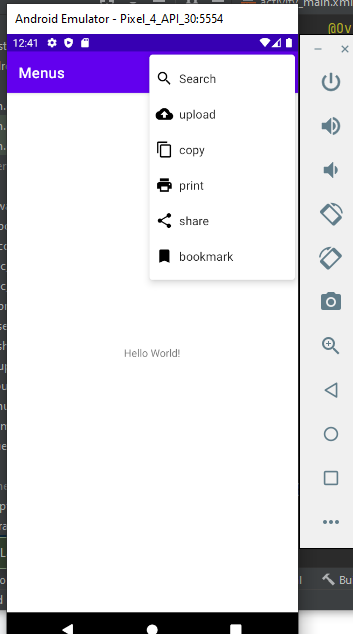
this.context=c;

}

}



**13.Android Menus**



package com.example.menus;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import androidx.appcompat.view.menu.MenuBuilder;

import android.annotation.SuppressLint;

import android.content.ClipData;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuInflater;

import android.view.MenuItem;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

@SuppressLint("RestrictedApi")

@Override

public boolean onCreateOptionsMenu(Menu menu) {

MenuInflater inflater = getMenuInflater();

inflater.inflate(R.menu.option\_menus,menu);

if(menu instanceof MenuBuilder){

MenuBuilder m= (MenuBuilder) menu;

m.setOptionalIconsVisible(true);

}

return super.onCreateOptionsMenu(menu);

}

@Override

public boolean onOptionsItemSelected(@NonNull MenuItem item) {

Toast.makeText(this,"Selected item:" +item.getTitle(),Toast.LENGTH\_SHORT).show();

switch (item.getItemId()){

case R.id.search\_item:

return true;

case R.id.upload\_item:

return true;

case R.id.copy\_item:

return true;

case R.id.print\_item:

return true;

case R.id.share\_item:

return true;

case R.id.bookmark\_item:

return true;

default:

return super.onOptionsItemSelected(item);

}

}

}

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

<menu xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

tools:content=".MainActivity">

<item android:id="@+id/search\_item"

android:title="Search"

android:icon="@drawable/search"/>

<item android:id="@+id/upload\_item"

android:title="upload"

android:icon="@drawable/upload"/>

<item android:id="@+id/copy\_item"

android:title="copy"

android:icon="@drawable/copy"/>

<item android:id="@+id/print\_item"

android:title="print"

android:icon="@drawable/print"/>

<item android:id="@+id/share\_item"

android:title="share"

android:icon="@drawable/share"/>

<item android:id="@+id/bookmark\_item"

android:title="bookmark"

android:icon="@drawable/bookmark"/>

</menu>

**14. Validations**   
  
<?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">

<androidx.constraintlayout.widget.Guideline

android:id="@+id/guideline"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

app:layout\_constraintGuide\_percent=".15" />

<com.google.android.material.textview.MaterialTextView

android:id="@+id/textView\_loginTitle"

style="@style/TextAppearance.MaterialComponents.Headline4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="login"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="@+id/guideline" />

<com.google.android.material.textfield.TextInputLayout

android:id="@+id/inputLayout\_username"

style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="32dp"

app:endIconMode="clear\_text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView\_loginTitle">

<com.google.android.material.textfield.TextInputEditText

android:id="@+id/inputEditText\_username"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="text"

android:hint="username"

android:nextFocusForward="@id/inputEditText\_mobile"

android:singleLine="true" />

</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout

android:id="@+id/inputLayout\_mobile"

style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="32dp"

app:endIconMode="clear\_text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/inputLayout\_username">

<com.google.android.material.textfield.TextInputEditText

android:id="@+id/inputEditText\_mobile"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="number"

android:hint="contact"

android:nextFocusForward="@id/inputLayout\_email"

android:singleLine="true" />

</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout

android:id="@+id/inputLayout\_email"

style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="32dp"

app:endIconMode="clear\_text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/inputLayout\_mobile">

<com.google.android.material.textfield.TextInputEditText

android:id="@+id/inputEditText\_email"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="email"

android:inputType="textEmailAddress"

android:nextFocusForward="@id/inputLayout\_password"

android:singleLine="true" />

</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout

android:id="@+id/inputLayout\_password"

style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="32dp"

app:endIconMode="password\_toggle"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/inputLayout\_email">

<com.google.android.material.textfield.TextInputEditText

android:id="@+id/inputEditText\_password"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="password"

android:imeOptions="actionDone"

android:inputType="textPassword"

android:singleLine="true" />

</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.button.MaterialButton

android:id="@+id/button\_login"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="32dp"

android:insetTop="0dp"

android:insetBottom="0dp"

android:text="login"

android:textAllCaps="false"

android:onClick="Validate"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/inputLayout\_password" />

</androidx.constraintlayout.widget.ConstraintLayout>

package com.example.formvalidation;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import com.google.android.material.textfield.TextInputLayout;

import java.util.regex.Pattern;

public class MainActivity extends AppCompatActivity {

TextInputLayout Username,Email,Mobile,Password;

private static final Pattern PASSWORD\_PATTERN =

Pattern.compile("^" +

"(?=.\*[0-9])" + //at least 1 digit

"(?=.\*[a-z])" + //at least 1 lower case letter

"(?=.\*[A-Z])" + //at least 1 upper case letter

"(?=.\*[a-zA-Z])" + //any letter

"(?=.\*[@#$%^&+=])" + //at least 1 special character

"(?=S+$)" + //no white spaces

".{4,}" + //at least 4 characters

"$");

// Pattern.compile("^" +

// "(?=.\*[@#$%^&+=])" + // at least 1 specialcharacter

// "(?=\\S+$)" + // no white spaces

// ".{4,}" + // at least 4 characters

// "$");

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Username=findViewById(R.id.inputLayout\_username);

Email=findViewById(R.id.inputLayout\_email);

Mobile=findViewById(R.id.inputLayout\_mobile);

Password=findViewById(R.id.inputLayout\_password);

}

public void Validate(View view){

if (!validatePhoneNumber() | !validateUsername() | !validateEmail()

| !validatePassword()) {

return;

}

}

private boolean validateUsername() {

String val = Username.getEditText().getText().toString().trim();

String checkspaces = "^[A-Za-z][A-Za-z0-9\_]{1,20}$";

if (val.isEmpty()) {

Username.setError("Field can not be empty");

return false;

} else if (val.length() > 20) {

Username.setError("Username is too large!");

return false;

} else if (!val.matches(checkspaces)) {

Username.setError("No White spaces are allowed!");

return false;

} else {

Username.setError(null);

Username.setErrorEnabled(false);

return true;

}

}

private boolean validateEmail() {

String val = Email.getEditText().getText().toString().trim();

String checkEmail = "[a-zA-Z0-9.\_-]+@[a-z]+.+[a-z]+";

if (val.isEmpty()) {

Email.setError("Field can not be empty");

return false;

} else if (!val.matches(checkEmail)) {

Email.setError("Invalid Email!");

return false;

} else {

Email.setError(null);

Email.setErrorEnabled(false);

return true;

}

}

// private boolean validatePassword() {

// String val = Password.getEditText().getText().toString().trim();

// String checkPassword = "^" +

// //"(?=.\*[0-9])" + //at least 1 digit

// //"(?=.\*[a-z])" + //at least 1 lower case letter

// //"(?=.\*[A-Z])" + //at least 1 upper case letter

// "(?=.\*[a-zA-Z])" + //any letter

// //"(?=.\*[@#$%^&+=])" + //at least 1 special character

// "(?=S+$)" + //no white spaces

// ".{4,}" + //at least 4 characters

// "$";

//

// if (val.isEmpty()) {

// Password.setError("Field can not be empty");

// return false;

// } else if (!val.matches(checkPassword)) {

// Password.setError("Password should contain 4 characters!");

// return false;

// } else {

// Password.setError(null);

// Password.setErrorEnabled(false);

// return true;

// }

// }

private boolean validatePhoneNumber() {

String val = Mobile.getEditText().getText().toString().trim();

String MobilePattern = "[0-9]{10}";

if (val.isEmpty()) {

Mobile.setError("Enter valid phone number");

return false;

} else if (!val.matches(MobilePattern)) {

Mobile.setError("No White spaces are allowed!");

return false;

} else {

Mobile.setError(null);

Mobile.setErrorEnabled(false);

return true;

}

}

private boolean validatePassword() {

String passwordInput =

Password.getEditText().getText().toString().trim();

// if password field is empty

// it will display error message "Field can not be empty"

if (passwordInput.isEmpty()) {

Password.setError("Field can not be empty");

return false;

}

// if password does not matches to the pattern

// it will display an error message "Password is too weak"

else if (!PASSWORD\_PATTERN.matcher(passwordInput).matches()) {

Password.setError("Password is too weak");

return false;

} else {

Password.setError(null);

return true;

}

}

}

