# COURSE OUTCOME 1(CO1)

**PROGRAM NO. 01**

**Date: 08/08/2024**

# LOGIN FORM

**AIM**: Design a Login Form with username and password using LinearLayout and toast valid

credentials.

**MainActivity.xml**

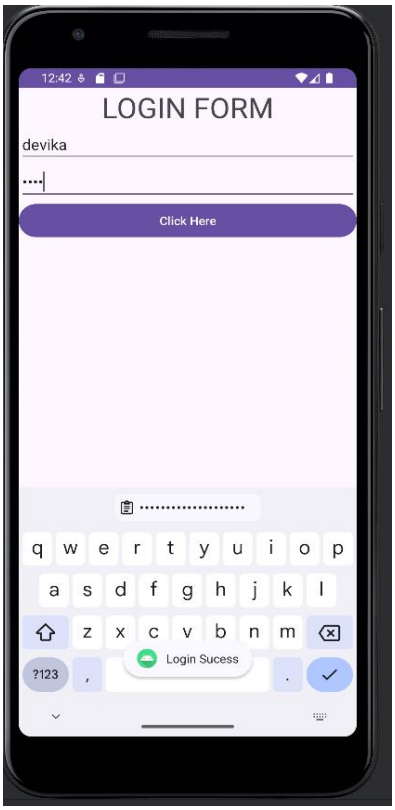
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
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

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <TextView
            android:id="@+id/textView2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="LOGIN FORM"
            android:textAlignment="center"
            android:textSize="34sp" />

        <EditText
            android:id="@+id/editTextText2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:ems="10"
            android:hint="Username"
            android:inputType="text" />

        <EditText
            android:id="@+id/editTextTextPassword"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:ems="10"
```

```
        android:hint="Password"
        android:inputType="textPassword" />

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="login_user"
        android:text="Click Here" />

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

**MainActivity.java**

```
package com.example.login;

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 EditUser,EditPass;
   Button BtnLogin;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      EditUser=findViewById(R.id.editTextText2);
      EditPass=findViewById(R.id.editTextTextPassword);
      BtnLogin=findViewById(R.id.button);
   }
   public void login_user(View view){
      String s1= EditUser.getText().toString();
      String s2= EditPass.getText().toString();
      if(s1.equals("devika") && s2.equals("1234")) {
         Toast.makeText(this, "Login Sucess", Toast.LENGTH_SHORT).show();
      }
      else{
         Toast.makeText(this, "Invalid username or password", Toast.LENGTH_SHORT).show();
      }
   }
}
```

## OUTPUT



**PROGRAM NO. 02**

**Date: 22/08/2024**

# ACTIVITY LIFECYCLE

**AIM:** Write a program that demonstrates Activity Lifecycle.

**MainActivity.xml**

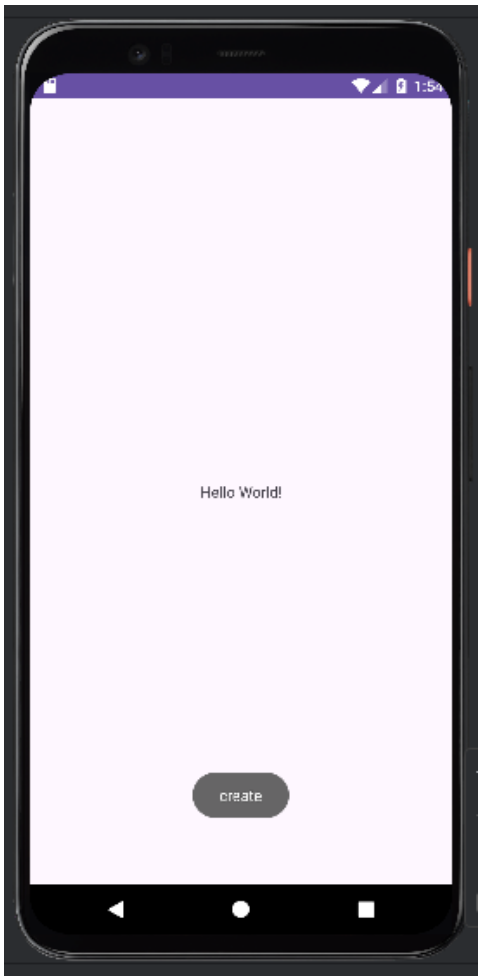
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayoutxmlns:android="http://schemas.and
roid.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
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_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

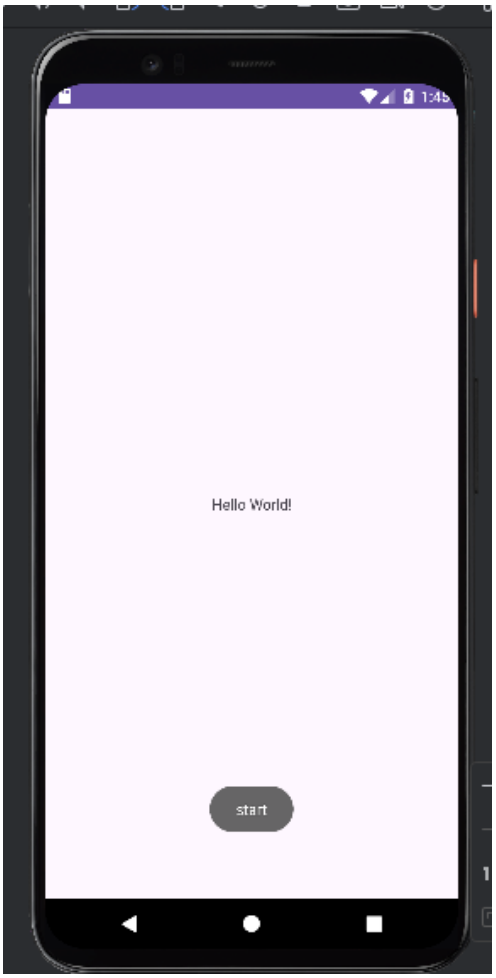
**MainActivity.java**

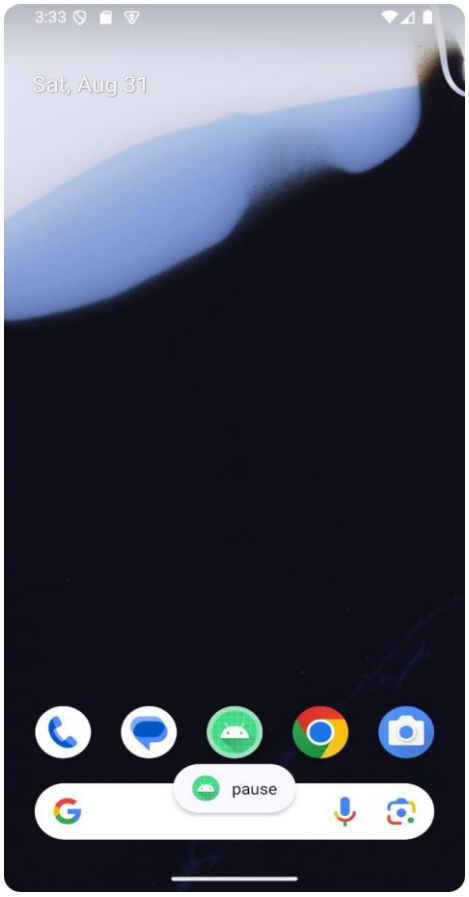
```
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
@Override
   protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
Toast.makeText(this, "create", Toast.LENGTH_LONG).show();
   }
   protected void onStart(){
super.onStart();
Toast.makeText(this, "start", Toast.LENGTH_LONG).show();
   }
   protected void onPause(){
```

```
super.onPause();
Toast.makeText(this, "pause", Toast.LENGTH_SHORT).show();
    }
    protected void onResume(){
super.onResume();
Toast.makeText(this, "Resume", Toast.LENGTH_SHORT).show();
    }
    protected void onRestart(){
super.onRestart();
Toast.makeText(this, "Restart", Toast.LENGTH_SHORT).show()}}protected void
onStop(){
super.onStop();
Toast.makeText(this, "Stop", Toast.LENGTH_SHORT).show()}}
```

## OUTPUT




3:33
Sat, Aug 31
pause

**PROGRAM NO. 03**

**Date: 29/08/2024**

## SIMPLE CALCULATOR

**AIM**: Implementing basic arithmetic operations of a simple calculator.

**MainActivity.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayoutxmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="vertical"
tools:context=".MainActivity"
<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="horizontal">
<TextView
android:id="@+id/f_name"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="First Number" />
<EditText
android:id="@+id/f_edi1"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:ems="10"
```

```
android:inputType="numberDecimal" />
</LinearLayout>
<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="horizontal">
<TextView
android:id="@+id/l_num"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="Last Number" />
<EditText
android:id="@+id/ed_num"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:ems="10"
android:inputType="numberDecimal" />
</LinearLayout>
<LinearLayout
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:orientation="horizontal">
<Button
android:id="@+id/button1"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="+" /><Button
android:id="@+id/button2"
```

```
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="-" />
<Button
android:id="@+id/button3"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="*" />
<Button
android:id="@+id/button4"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="/" />
</LinearLayout>
<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="horizontal">
<TextView
android:id="@+id/re_s"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_weight="1"
android:text="Result" />
<TextView
android:id="@+id/res_view"
android:layout_width="0dp"
android:layout_height="wrap_content"
```

```
android:layout_weight="1" />
</LinearLayout></LinearLayout>
```

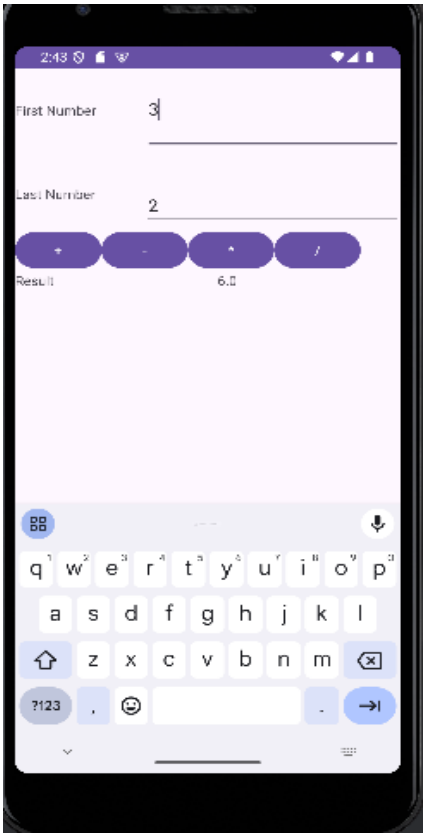
**MainActivity.java**

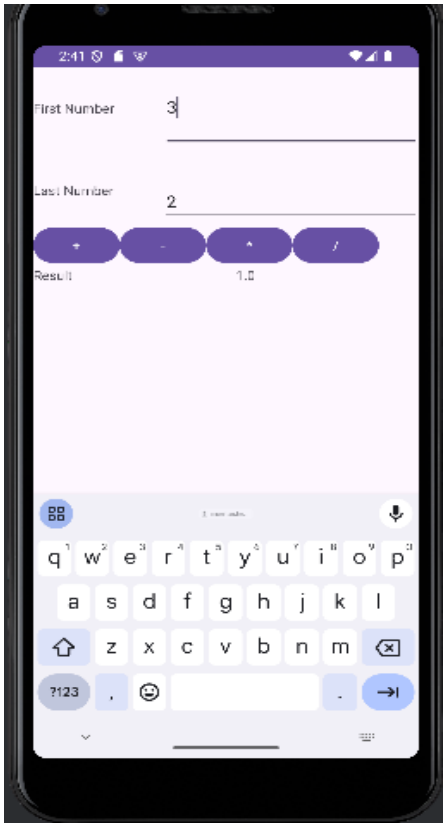
```
codepackagecom.example.arithmeticoperations;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
private EditTextfEditText, lEditText;
private TextViewresultTextView;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
fEditText = findViewById(R.id.f_edi1);
lEditText = findViewById(R.id.ed_num);
resultTextView = findViewById(R.id.res_view);
Button addButton = findViewById(R.id.button1);
Button subtractButton = findViewById(R.id.button2);
Button multiplyButton = findViewById(R.id.button3);
Button divideButton = findViewById(R.id.button4);
ButtonaddButton.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
performOperation(“+”);
}
```

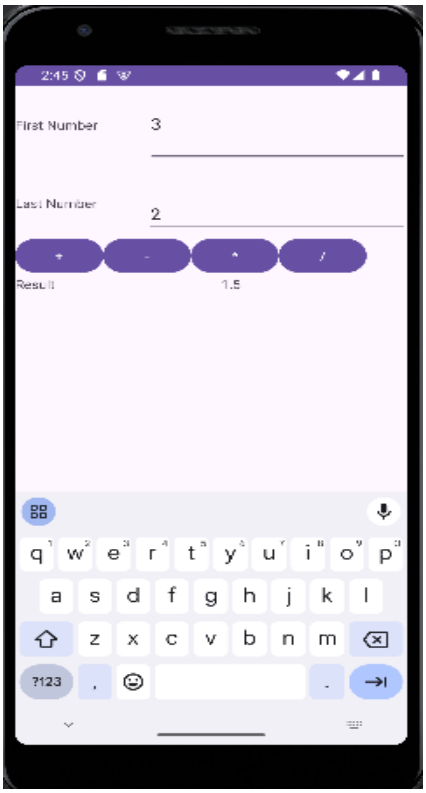
```
});
subtractButton.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
performOperation(“-“);
}
});
multiplyButton.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
performOperation(“*”);
}
});
divideButton.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
performOperation(“/”);
}
});
}
private void performOperation(String operation) {
String firstInput = fEditText.getText().toString();
String secondInput = lEditText.getText().toString();
if (firstInput.isEmpty() || secondInput.isEmpty()) {
resultTextView.setText(”Error: Missing input”);
return;
}
double num1 = Double.parseDouble(firstInput);
double num2 = Double.parseDouble(secondInput);
double result;
switch (operation) {
```

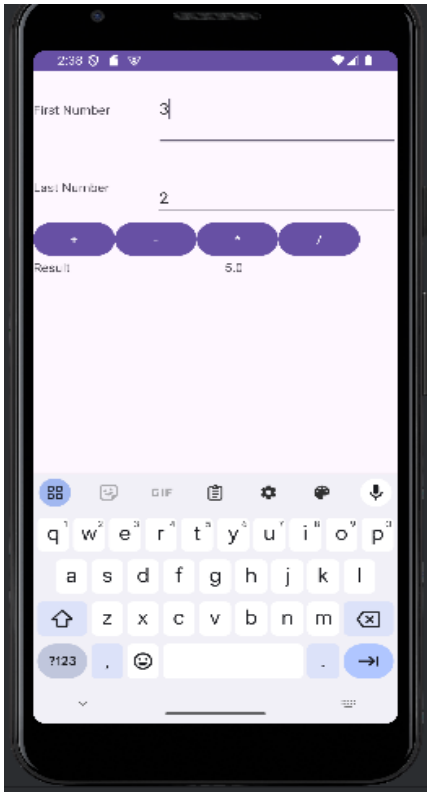
```
case ”+”:
result = num1 + num2;
break;
case “-“
result = num1 - num2;
break;
case “*”:
result = num1 * num2;
break;
case “/”:
if (num2 == 0) {
resultTextView.setText(“Error: Divide by zero”);
return;
}
result = num1 / num2;
break;
default:
resultTextView.setText(“Error: Unknown operation”);
return;
}
// Display the result
resultTextView.setText(String.valueOf(result));
}}
```

## OUTPUT


First Number
3
Last Number
2
Result
6.0


First Number
3
Last Number
2
Result
1.0


First Number
3
Last Number
2
Result
1.5


First Number
3
Last Number
2
Result
5.0