**Experiment No. 5**

**Aim:** Create and validate a login application using username as Email ID else login button must remain disabled.

**Program:**

* **Activity.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"  
 android:background="@color/mor"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/tv1"  
 android:text="Login Form"  
 android:textStyle="bold"  
 android:textSize="35sp"  
 android:textColor="@color/purple\_500"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="100dp"/>  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/tv2"  
 android:text="Email:"  
 android:textSize="20dp"  
 android:layout\_marginTop="175dp"/>  
  
 <EditText  
 android:id="@+id/et1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/tv1"  
 android:layout\_marginLeft="45dp"  
 android:layout\_marginTop="15dp"  
 android:layout\_toRightOf="@+id/tv2"  
 android:gravity="center"  
 android:hint="Please Enter Your Email Id"  
 android:inputType="textEmailAddress"  
 android:minHeight="48dp" />  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/tv3"  
 android:text="Password:"  
 android:textSize="20dp"  
 android:layout\_marginTop="235dp"/>  
 <EditText  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/et2"  
 android:layout\_below="@+id/et1"  
 android:layout\_marginLeft="15dp"  
 android:layout\_marginTop="15dp"  
 android:layout\_toRightOf="@+id/tv3"  
 android:gravity="center"  
 android:hint="Please Enter Your Password"  
 android:inputType="textPassword"  
 android:minHeight="48dp"/>  
 <Button  
 android:id="@+id/log"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="35dp"  
 android:padding="13dp"  
 android:layout\_marginLeft="175dp"  
 android:layout\_below="@+id/et2"  
 android:text="Login"  
 android:onClick="Login"  
 android:enabled="false"  
 />  
  
</RelativeLayout>

* **colors.xml :-**

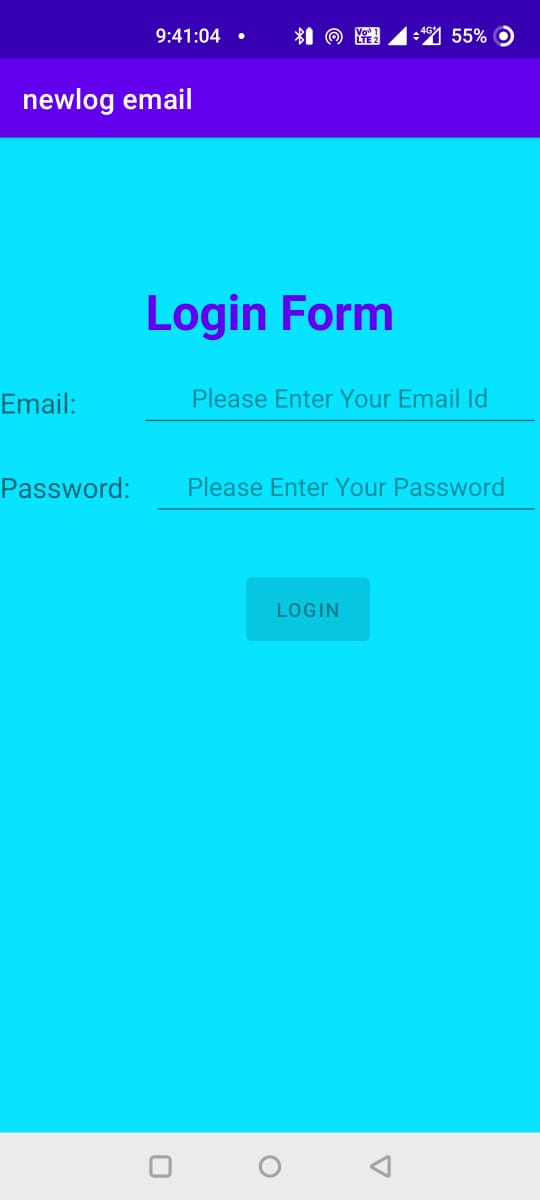
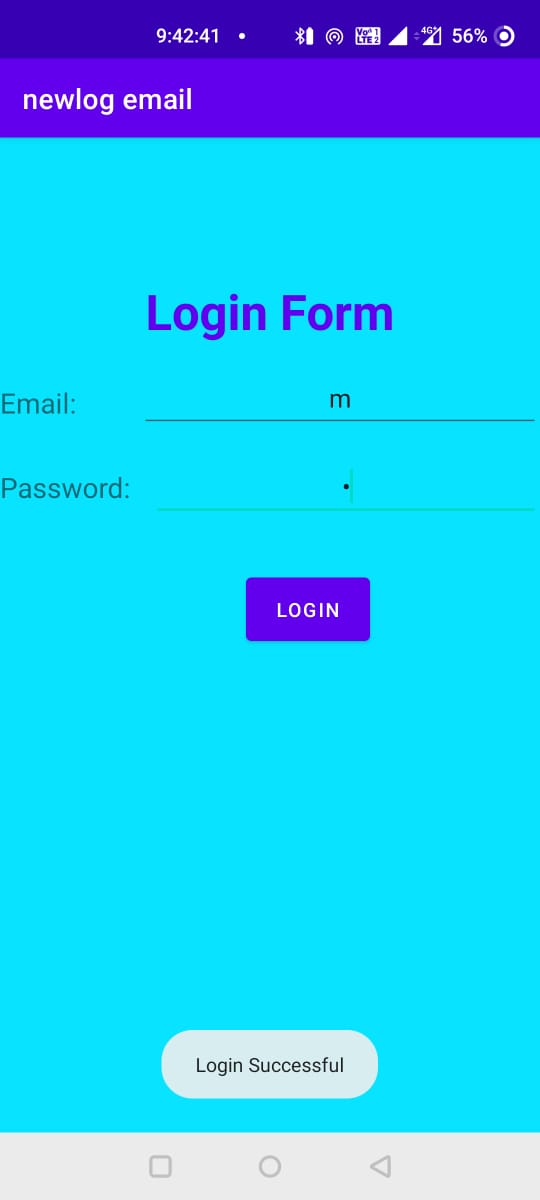
*<?*xml version="1.0" encoding="utf-8"*?>*<resources>  
 <color name="purple\_200">#FFBB86FC</color>  
 <color name="purple\_500">#FF6200EE</color>  
 <color name="purple\_700">#FF3700B3</color>  
 <color name="teal\_200">#FF03DAC5</color>  
 <color name="teal\_700">#FF018786</color>  
 <color name="black">#FF000000</color>  
 <color name="white">#FFFFFFFF</color>  
 <color name="mor">#08E3FF</color>  
</resources>

* **MainActivity.java :-**

**A) onTextChanged Method:-**

package com.example.newlogemail;  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle;  
import android.text.Editable;  
import android.text.TextWatcher;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
importcom.google.android.material.internal.TextWatcherAdapter;  
  
public class MainActivity extends AppCompatActivity {  
EditText username, password;  
Button Login;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 username= findViewById(R.id.*et1*);  
 password= findViewById(R.id.*et2*);  
 Login= findViewById(R.id.*log*);  
 username.addTextChangedListener(LoginText);  
 password.addTextChangedListener(LoginText);  
 }  
 private TextWatcher LoginText= new TextWatcher() {  
 @Override  
 public void beforeTextChanged(CharSequence charSequence, int i, int i1, int i2) {  
 }  
 @Override  
 public void onTextChanged(CharSequence charSequence, int i, int i1, int i2) {  
 if(!username.equals("") && !password.equals("")){  
 Login.setEnabled(true);  
 }  
 }  
 @Override  
 public void afterTextChanged(Editable editable) {  
 }  
 };  
 public void Login(View view) {  
 Toast.*makeText*(this, "Login Successful", Toast.*LENGTH\_SHORT*).show();  
 }  
}

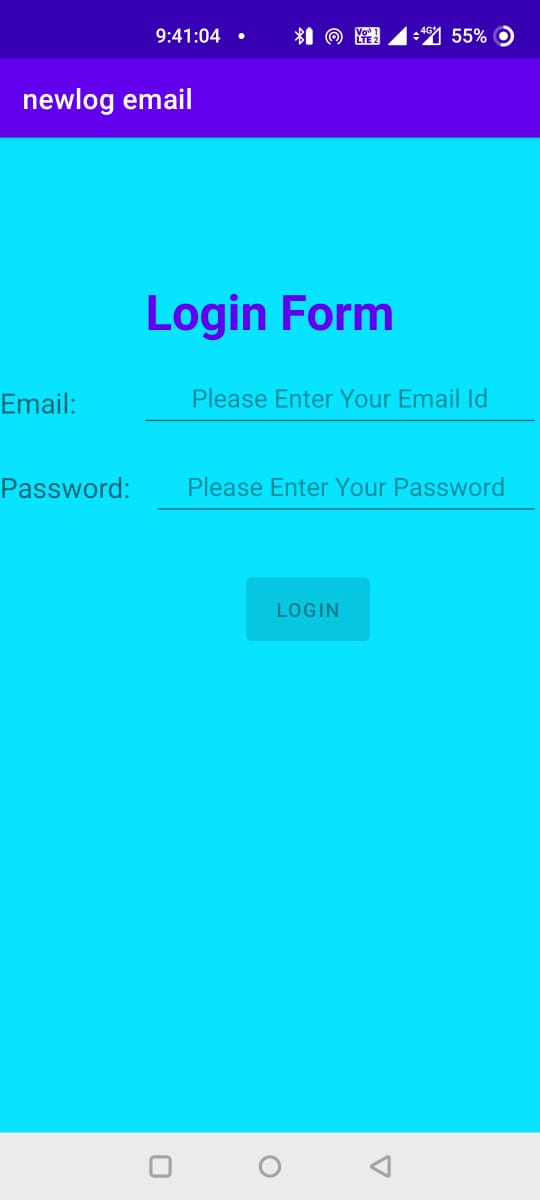
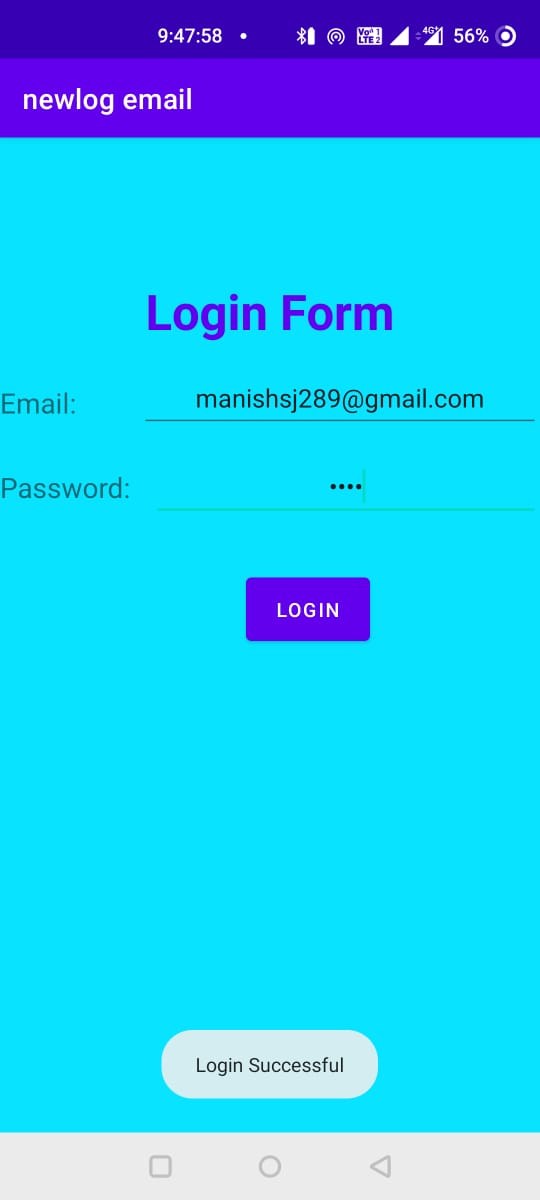
**Output:**

** **

**B) afterTextChanged Method:-**

package com.example.newlogemail;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.text.Editable;  
import android.text.TextWatcher;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import com.google.android.material.internal.TextWatcherAdapter;  
  
public class MainActivity extends AppCompatActivity {  
EditText username, password;  
Button Login;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 username= findViewById(R.id.*et1*);  
 password= findViewById(R.id.*et2*);  
 Login= findViewById(R.id.*log*);  
  
 username.addTextChangedListener(LoginText);  
 password.addTextChangedListener(LoginText);  
  
 }  
 private TextWatcher LoginText= new TextWatcher() {  
 @Override  
 public void beforeTextChanged(CharSequence charSequence, int i, int i1, int i2) {  
  
 }  
  
 @Override  
 public void onTextChanged(CharSequence charSequence, int i, int i1, int i2) {  
  
 }  
  
 @Override  
 public void afterTextChanged(Editable editable) {  
 if(username.getText().toString().equals("manishsj289@gmail.com")&& password.getText().toString().equals("2809")){  
 Login.setEnabled(true);  
 }  
 }  
 };  
  
  
 public void Login(View view) {  
 Toast.*makeText*(this, "Login Successful", Toast.*LENGTH\_SHORT*).show();  
 }  
}

**Output:**

** **

**Conclusion:**

Hence, by completing this experiment I came to know that how to Create application for demonstration of android activity life cycle.

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| **Writeup & Oral**  **(4)** | **Practical Performance**  **(4)** | **Attendance**  **(2)** | **Total**  **(10)** |
|  |  |  |  |