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
<?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:orientation="vertical"
    android:background="@color/yellow"
    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:background="@color/red"
        android:textColor="@color/white"
        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="Name :-"
        android:textSize="20dp"
        android:textColor="@color/black"
        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"
```

```xml
        android:gravity="center"
        android:hint="Please Enter Your Name"
        android:minHeight="48dp" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/tv3"
        android:text="Password :-"
        android:textColor="@color/black"
        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
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="purple_200">#FFBB86FC</color>
    <color name="black">#FF000000</color>
    <color name="white">#FFFFFFFF</color>
    <color name="mor">#08E3FF</color>
    <color name="red">#F43636</color>
    <color name="yellow">#FFEB3B</color>
</resources>
```
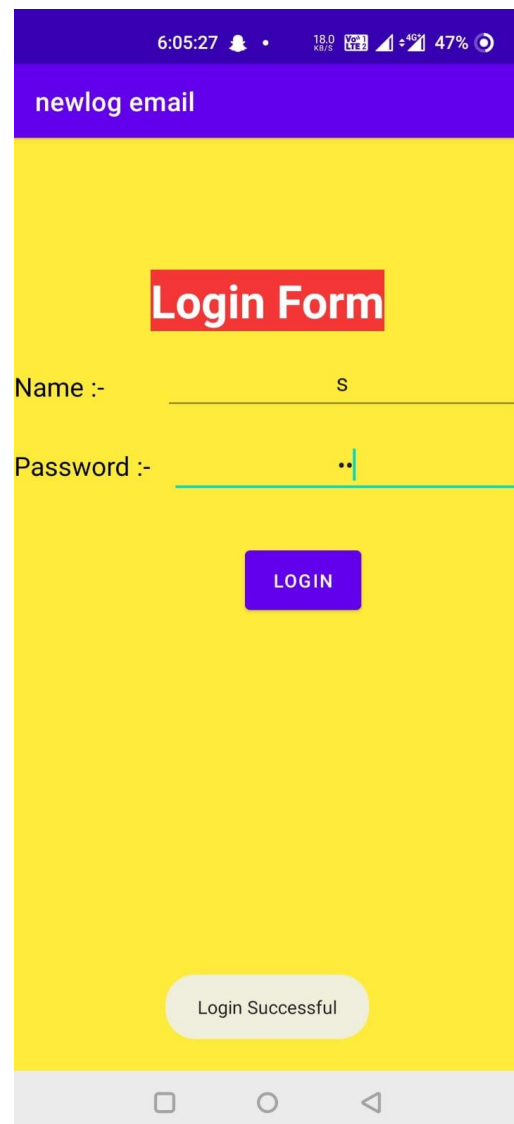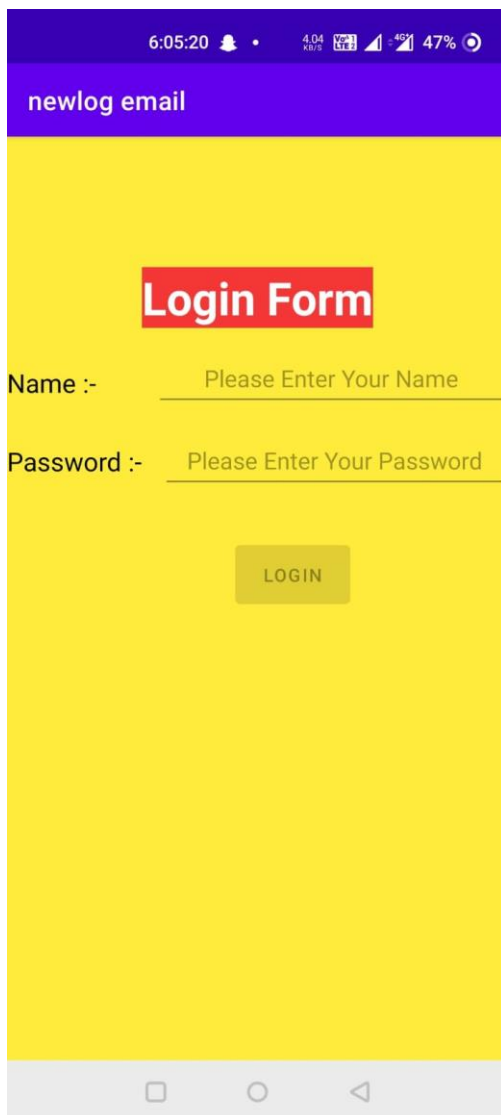
- **MainActivity.java :-**

A) onTextChanged Method:-

```java
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:-

```java
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;
```

```java
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("sejalpawars12345@gmai
l.com")&& password.getText().toString().equals("sezz")){
                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 and validate a login application using username as Email ID else login button must remain disabled.

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