Aim :- To create a login form with a landing page.

Algorithm:-

1. Open your Android Studio . Click on Start a New Android Studio Project .Give Application Name Login Form and leave other fields as it is, then click NEXT.
2. Select the Empty Activity and click NEXT.
3. Now we have activity_main.xml in which we have to make the layout of our app.
4. Add two EditText for UserName and Password respectively , one button for the login and a TextView for showing the number of attempt remaining. Thus our layout is finished.
5. Now in our MainActivity.java file add variable for the respective field we have selected in xml file which is UserName , password , Info , Login, counter and connect them to the xml file by the help of declared id.
6. Make a validate function which will validate the UserName and password and move us to the landing page.
7. The validate function has a counter also which is intialised to 3 and will decrease whenever the validation will fail. And also set the text in the textView field about how many attempt is remaining.
8. For Login button make a onClickListener which will run the validate function when the button is clicked and navigate us to the landing page.
9. Thus our login page is finished.

Activity_main.xml

```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">

    <EditText
        android:id="@+id/UserName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="User Name"
```

```xml
        android:inputType="textPersonName"
        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="0.303" />

    <EditText
        android:id="@+id/password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Password"
        android:inputType="textPassword"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/UserName"
        app:layout_constraintVertical_bias="0.15" />

    <Button
        android:id="@+id/btnLogin"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login"
        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/password"
        app:layout_constraintVertical_bias="0.178" />

    <TextView
        android:id="@+id/info"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="88dp"
        android:text="TextView"
        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/btnLogin" />

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

MainActivity.java:

```java
package com.example.loginform;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
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 EditText Name;
    private EditText Password;
    private TextView Info;
    private Button Login;
    private int counter = 3;

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

        Name = (EditText)findViewById(R.id.UserName);
        Password = (EditText)findViewById(R.id.password);
        Info = (TextView)findViewById(R.id.info);
        Login = (Button)findViewById(R.id.btnLogin);

        Info.setText("Number of attempts remaming is 3");

        Login.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

validate(Name.getText().toString(),Password.getText().toString
());
            }
        });
    }
    private void validate(String userName , String password){
        if(userName.equals("Admin") &&
password.equals("1234")){
            Intent intent = new
Intent(MainActivity.this,MainActivity2.class);
            startActivity(intent);
        }else{
            counter--;

            Info.setText("Number of Attempts remaning" +
String.valueOf(counter));
```

```java
            if(counter == 0)
                Login.setEnabled(false);
        }
    }
}
```

activity_main2.xml:

```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"
    android:layout_gravity="center"
    android:background="@color/teal_700"
    tools:context=".MainActivity2">


    <TextView
        android:id="@+id/loged"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Congratulation!!!!"
        android:textColor="@color/white"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.445"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.338" />

    <TextView
        android:id="@+id/loged"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="You have sucessfully login :)"

        android:textColor="@color/white"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/loged"
        app:layout_constraintVertical_bias="0.594" />
</androidx.constraintlayout.widget.ConstraintLayout>
```
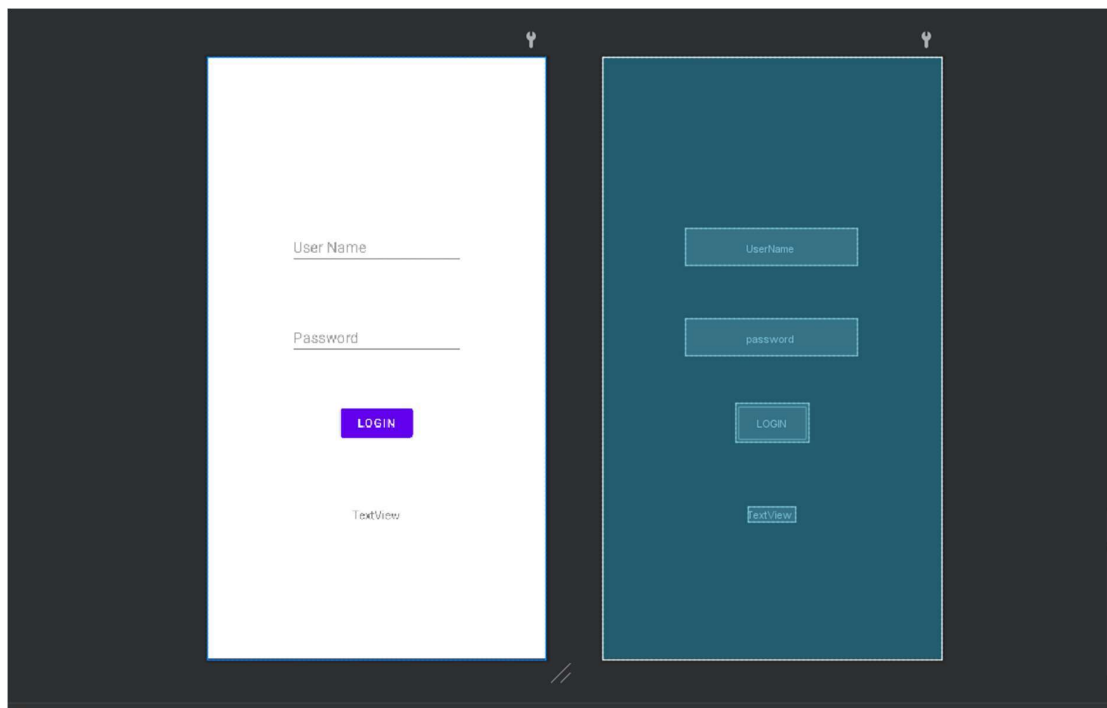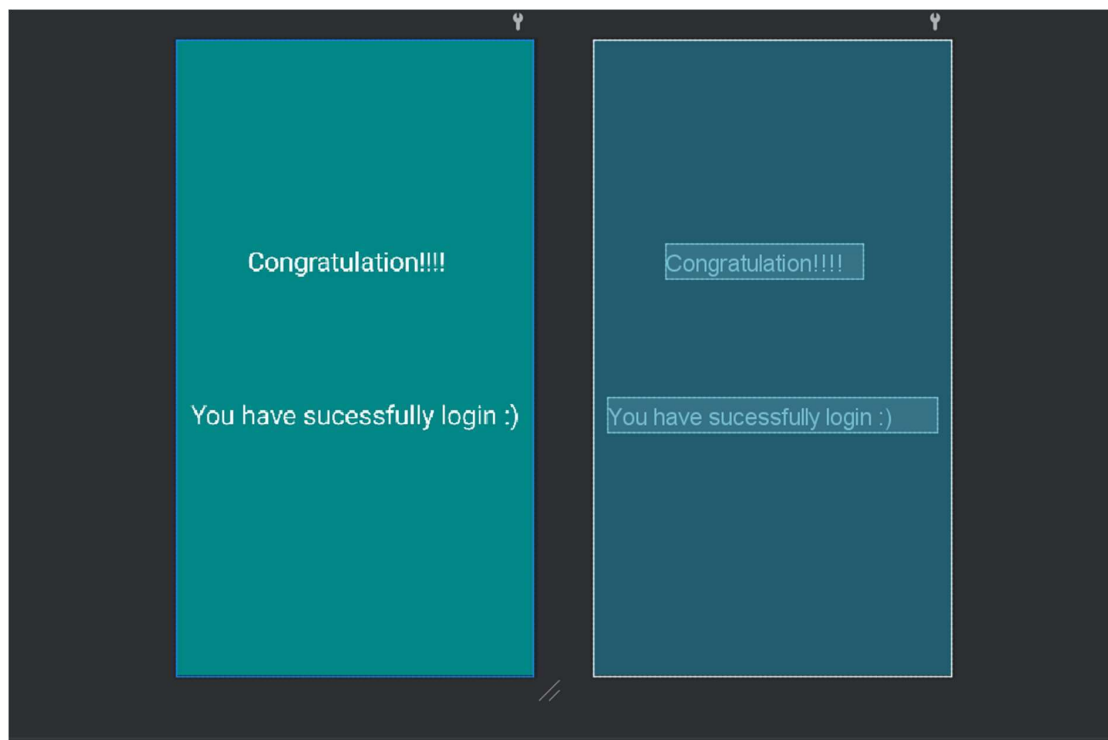
MainActivity2.java:

```java
package com.example.loginform;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity2 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
    }
}
```
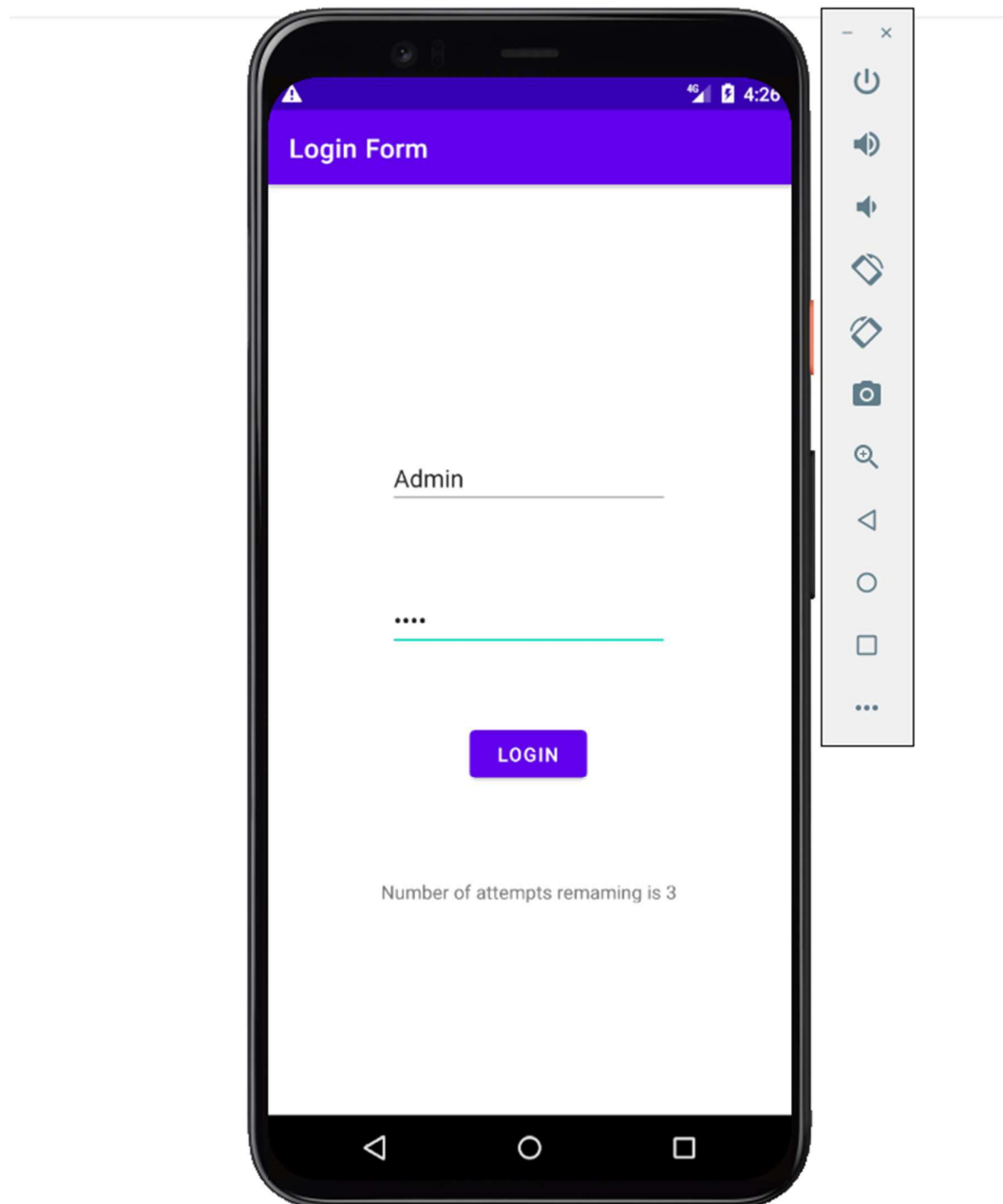
Output1(Design and blueprint):-

(design and login page of landing page):-

Congratulation!!!!

You have sucessfully login :)

Output2_Emulator:-

After the login:-