**PRACTICAL NO.2**

**Programming Resources**

Android Resources: (Color, Theme, String, Drawable, Dimension, Image)

**Code:**

**Activity\_main.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"  
 android:id="@+id/bg"  
 >  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="221dp"  
 android:layout\_height="178dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.088"  
 app:srcCompat="@drawable/person" />  
  
 <EditText  
 android:id="@+id/name"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="Name"  
 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="0.38" />  
  
 <EditText  
 android:id="@+id/pass"  
 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\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.462" />  
  
 <Button  
 android:id="@+id/button"  
 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\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.549" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Color Change"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.639" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.kt**

package com.example.demo  
  
import android.content.Intent  
import android.graphics.Color  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Toast  
import kotlinx.android.synthetic.main.activity\_main.\*  
import kotlinx.android.synthetic.main.activity\_second\_page.\*  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.activity\_main)  
  
 button.setOnClickListener {  
 var n=name.text.toString()  
 var p=pass.text.toString()  
 if (n=="tanmay" && p=="123456"){  
 Toast.makeText(this,"Login Successful",Toast.LENGTH\_LONG).show()  
 }  
 else{  
 Toast.makeText(this,"Invalid Username or Password",Toast.LENGTH\_LONG).show()  
 }  
 }  
 var op:Int=0  
 button2.setOnClickListener {  
 if(op==0){  
 bg.setBackgroundColor(Color.YELLOW)  
 op=1  
 }  
 else{  
 bg.setBackgroundColor(Color.GRAY)  
 op=0  
 }  
 }  
 }  
 }

**Output:**

 