1. Write an Android Program to Change the Image Displayed on the Screen.  
   Ans: -

**ImgChange.java**

package com.example.bulb;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.ImageView;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

ImageView img;

TextView text;

Button btn;

Boolean click=false;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btn = findViewById(R.id.switch1);

img = findViewById(R.id.Bulb);

text = findViewById(R.id.t1);

text.setText("OFF");

String imageName = (String) img.getContentDescription();

btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if(click == false)

{

img.setImageResource(R.drawable.on1);

text.setText("ON");

click = true;

}

else{

img.setImageResource(R.drawable.off);

text.setText("OFF");

click = false;

}

}

});

}

}

activity\_img\_change.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">

<ImageView

android:id="@+id/Bulb"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.455"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.336"

app:srcCompat="@drawable/off"

android:contentDescription="TODO" />

<TextView

android:id="@+id/t1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.329"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.789"

tools:text="OFF" />

<Switch

android:id="@+id/switch1"

android:layout\_width="76dp"

android:layout\_height="47dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.492"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/Bulb"

app:layout\_constraintVertical\_bias="0.34" />

</androidx.constraintlayout.widget.ConstraintLayout>