**2. Write an android code to turn ON /OFF the Wi-Fi.**

**XML code:**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 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:orientation="vertical">  
  
 <ToggleButton  
 android:id="@+id/mytoggle"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="150dp"  
 android:layout\_marginTop="250dp"/>  
  
</LinearLayout>

**Java code:**

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;

import android.net.wifi.WifiManager;

import android.os.Bundle;

import android.view.View;

import android.widget.Toast;

import android.widget.ToggleButton;

public class MainActivity extends AppCompatActivity {

ToggleButton toggleButton;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

toggleButton = findViewById(R.id.*mytoggle*);

toggleButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

try{

if (toggleButton.isChecked()){

WifiManager wifi = (WifiManager) getApplicationContext().getSystemService(Context.*WIFI\_SERVICE*);

wifi.setWifiEnabled(true);

Toast.*makeText*(MainActivity.this, "WIFI turned on!!", Toast.*LENGTH\_SHORT*).show();

}

else{

WifiManager wifi = (WifiManager) getApplicationContext().getSystemService(Context.*WIFI\_SERVICE*);

Toast.*makeText*(MainActivity.this, "WIFI turned off!!", Toast.*LENGTH\_SHORT*).show();

wifi.setWifiEnabled(false);

}

}

catch(Exception e){

Toast.*makeText*(MainActivity.this, e.toString(), Toast.*LENGTH\_SHORT*).show();

}

}

});

}

}

**Android Manifest.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools">

<uses-permission android:name="android.permission.CHANGE\_WIFI\_STATE" />

<uses-permission android:name="android.permission.ACCESS\_WIFI\_STATE"/>

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.MyApplication"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

<meta-data

android:name="android.app.lib\_name"

android:value="" />

</activity>

</application>

</manifest>

**3. Write an android code to turn ON /OFF the Bluetooth.**

**XML code:**

*<?*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:padding="16dp"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/btnTurnOn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Turn On Bluetooth"  
 android:layout\_centerHorizontal="true"/>  
  
 <Button  
 android:id="@+id/btnTurnOff"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Turn Off Bluetooth"  
 android:layout\_below="@+id/btnTurnOn"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="16dp"/>  
</RelativeLayout>

**Java code:**

package com.example.myapplication;

import android.bluetooth.BluetoothAdapter;

import android.content.Intent;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

private BluetoothAdapter bluetoothAdapter;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

bluetoothAdapter = BluetoothAdapter.*getDefaultAdapter*();

Button btnTurnOn = findViewById(R.id.*btnTurnOn*);

Button btnTurnOff = findViewById(R.id.*btnTurnOff*);

btnTurnOn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

enableBluetooth();

}

});

btnTurnOff.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

disableBluetooth();

}

});

}

private void enableBluetooth() {

if (bluetoothAdapter != null) {

if (!bluetoothAdapter.isEnabled()) {

Intent enableBtIntent = new Intent(BluetoothAdapter.*ACTION\_REQUEST\_ENABLE*);

startActivity(enableBtIntent);

}

}

}

private void disableBluetooth() {

if (bluetoothAdapter != null) {

if (bluetoothAdapter.isEnabled()) {

bluetoothAdapter.disable();

}

}

}

}

**AndroidManifest.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools">

<uses-permission android:name="android.permission.BLUETOOTH"/>

<uses-permission android:name="android.permission.BLUETOOTH\_ADMIN"/>

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.MyApplication"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

<meta-data

android:name="android.app.lib\_name"

android:value="" />

</activity>

</application>

</manifest>