

Develop the code to manage Permission using Manifest file and run time from Activity, and toggle state of WiFi and Bluetooth.

#### AndroidManifest.xml

```
<uses-permission android:name="android.permission.BLUETOOTH" />
<uses-permission android:name="android.permission.BLUETOOTH_ADMIN" />
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE" />
<uses-permission android:name="android.permission.CHANGE_WIFI_STATE" />
```

#### MainActivity.java

```
package com.example.practical12;
import android.app.AppCompatActivity;
import android.bluetooth.BluetoothAdapter;
import android.content.Context;
import android.net.wifi.WifiManager;
import android.os.Bundle;
import android.view.View;
import android.widget.CompoundButton;
import android.widget.Switch;

public class MainActivity extends AppCompatActivity {

    private WifiManager wifiManager;
    private BluetoothAdapter bluetoothAdapter;
    View wifiSwitch;
    private Switch bluetoothSwitch;

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

        wifiManager = (WifiManager)
getApplicationContext().getSystemService(Context.WIFI_SERVICE);
        bluetoothAdapter = BluetoothAdapter.getDefaultAdapter();

        wifiSwitch = findViewById(R.id.switch2);
        bluetoothSwitch = (Switch) findViewById(R.id.switch1);

        // Set initial state of switches
        ((CompoundButton)
wifiSwitch).setChecked(wifiManager.isWifiEnabled());
        bluetoothSwitch.setChecked(bluetoothAdapter.isEnabled());

        bluetoothSwitch.setOnCheckedChangeListener(new
CompoundButton.OnCheckedChangeListener() {
            @Override
```

```

        public void onCheckedChanged(CompoundButton buttonView, boolean
isChecked) {
            toggleBluetooth(isChecked);
        }
    });
}

private void toggleWiFi(boolean enable) {
    if (enable) {
        wifiManager.setWifiEnabled(true);
    } else {
        wifiManager.setWifiEnabled(false);
    }
}

private void toggleBluetooth(boolean enable) {
    if (enable) {
        bluetoothAdapter.enable();
    } else {
        bluetoothAdapter.disable();
    }
}
}
}

```

activity\_main.xml

```

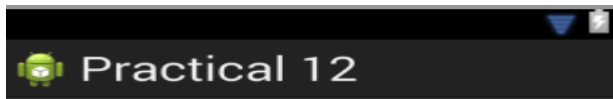
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Switch
        android:id="@+id/switch1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="42dp"
        android:layout_marginTop="81dp"
        android:text="Bluetooth" />

    <Switch
        android:id="@+id/switch2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/switch1"
        android:layout_below="@+id/switch1"
        android:layout_marginTop="46dp"

```

```
        android:text="Wifi" />
</RelativeLayout>
```



Bluetooth ☐ OFF

Wifi ☐ OFF