

Practical No 24

X.1

- **Program**
- **XML File:**

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

<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"

    tools:context=".MainActivity"

    android:transitionGroup="true">

    <TextView

        android:id="@+id/textview"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_alignParentTop="true"

        android:layout_centerHorizontal="true"

        android:layout_marginTop="36dp"

        android:text="Bluetooth"

        android:textColor="#150B0B"

        android:textSize="35dp" />

    <Button

        android:id="@+id/button"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_below="@+id/textview"

        android:layout_alignParentStart="true"
```

```
android:layout_alignParentEnd="true"
android:layout_marginStart="41dp"
android:layout_marginTop="10dp"
android:layout_marginEnd="246dp"
android:clickable="true"
android:onClick="on"
android:text="Turn On" />
```

```
<Button
```

```
android:id="@+id/button2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/button"
android:layout_alignParentStart="true"
android:layout_marginStart="41dp"
android:layout_marginTop="3dp"
android:onClick="visible"
android:text="Get visible" />
```

```
<Button
```

```
android:id="@+id/button3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/button2"
android:layout_alignParentStart="true"
android:layout_centerVertical="true"
android:layout_marginStart="41dp"
android:layout_marginLeft="-121dp"
android:layout_marginTop="4dp"
```

```
android:layout_toRightOf="@id/button2"
android:onClick="list"
android:text="List devices" />
```

```
<Button
```

```
android:id="@+id/button4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/button"
android:layout_alignParentStart="true"
android:layout_alignParentLeft="true"
android:layout_marginStart="41dp"
android:layout_marginLeft="43dp"
android:layout_marginTop="105dp"
android:onClick="off"
android:text="turn off" />
```

```
<ListView
```

```
android:id="@+id/listView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/button2"
android:layout_alignStart="@+id/button"
android:layout_alignLeft="@+id/button"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="-2dp"
android:layout_marginLeft="-2dp"
android:layout_marginTop="156dp"
```

```

        android:layout_marginEnd="0dp"
        android:layout_marginBottom="-169dp" />
    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/button4"
        android:layout_alignStart="@+id/listView"
        android:layout_alignLeft="@+id/listView"
        android:layout_marginStart="3dp"
        android:layout_marginLeft="3dp"
        android:layout_marginTop="28dp"
        android:text="Paired devices:"
        android:textColor="#030901"
        android:textSize="25dp" />
</RelativeLayout>

```

- **JAVA File:**

```

package com.example.pr_24_1;

import android.app.Activity;

import android.bluetooth.BluetoothAdapter;

import android.bluetooth.BluetoothDevice;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.ArrayAdapter;

import android.widget.Button;

```

```

import android.widget.ListView;

import android.widget.Toast;

import java.util.ArrayList;

import java.util.Set;

public class MainActivity extends Activity {

    Button b1,b2,b3,b4;

    private BluetoothAdapter BA;

    private Set<BluetoothDevice>pairedDevices;

    ListView lv;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        b1 = (Button) findViewById(R.id.button);

        b2=(Button)findViewById(R.id.button2);

        b3=(Button)findViewById(R.id.button3);

        b4=(Button)findViewById(R.id.button4);

        BA = BluetoothAdapter.getDefaultAdapter();

        lv = (ListView)findViewById(R.id.listView);

    }

    public void on(View v){

        if (!BA.isEnabled()) {

            Intent turnOn = new

            Intent(BluetoothAdapter.ACTION_REQUEST_ENABLE);

            startActivityForResult(turnOn, 0);

            Toast.makeText(getApplicationContext(), "Turned

            on",Toast.LENGTH_LONG).show();

```

```
    } else {  
        Toast.makeText(getApplicationContext(), "Already on",  
        Toast.LENGTH_LONG).show();  
    }  
}  
  
public void off(View v){  
    BA.disable();  
  
    Toast.makeText(getApplicationContext(), "Turned off"  
,Toast.LENGTH_LONG).show();  
}  
  
public void visible(View v){  
    Intent getVisible = new  
    Intent(BluetoothAdapter.ACTION_REQUEST_DISCOVERABLE);  
  
    startActivityForResult(getVisible, 0);  
}  
  
public void list(View v){  
    pairedDevices = BA.getBondedDevices();  
  
    ArrayList list = new ArrayList();  
  
    for(BluetoothDevice bt : pairedDevices) list.add(bt.getName());  
  
    Toast.makeText(getApplicationContext(), "Showing Paired  
Devices",Toast.LENGTH_SHORT).show();  
  
    final ArrayAdapter adapter = new  
    ArrayAdapter(this,android.R.layout.simple_list_item_1, list);  
  
    lv.setAdapter(adapter);  
}  
}
```

- **Manifest File:**

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

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

- **Output:**

