Practical 24

Practical Related Questions:

1. **Name the methods which are used to enable and disable Bluetooth Adapter.**
   1. enable()
   2. disable()

2. **Explain the purpose of *ACTION_REQUEST_DISCOVERABLE* Constant**

   Activity Action: Show a system activity that requests discoverable mode. This activity will also request the user to turn on Bluetooth if it is not currently enabled. Discoverable mode is equivalent to SCAN_MODE_CONNECTABLE_DISCOVERABLE. It allows remote devices to see this Bluetooth adapter when they perform a discovery.

3. **List the uses of setNames(String name) method**

   The setName() method provided by the java.lang.Thread class is used to change the name of the thread.

Practical 24

Exercise:

XML:-

```
<?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"

    android:padding="30dp"
    >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Bluetooth"
        android:textSize="30dp"/>

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Turn On"
        android:id="@+id/On"
        />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Get Visible"
        android:id="@+id/visible"
        />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="List Devices"
        android:id="@+id/devices"
        />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Turn Off"
        android:id="@+id/Off"
        />

    <ListView
        android:id="@+id/lv"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />

</LinearLayout>
```

Practical 24

Java:-

```
package com.example.practical24;

import androidx.appcompat.app.AppCompatActivity;

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 AppCompatActivity {
    Button On,Off,visible,devices;
    private BluetoothAdapter BA;
    private Set<BluetoothDevice> pairedDevices;
    ListView lv;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        On=(Button) findViewById(R.id.On);
        Off=(Button) findViewById(R.id.Off);
        visible=(Button) findViewById(R.id.visible);
        devices=(Button) findViewById(R.id.devices);
        BA=BluetoothAdapter.getDefaultAdapter();
        lv=(ListView) findViewById(R.id.lv) ;


        On.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if(!BA.isEnabled()){
                    Intent turnOn=new
Intent(BluetoothAdapter.ACTION_REQUEST_ENABLE);
                    startActivity(turnOn);
                    Toast.makeText(MainActivity.this, "BW turned On",
Toast.LENGTH_SHORT).show();
                }else{
                    Toast.makeText(getApplicationContext(), "Already on",
Toast.LENGTH_LONG).show();
                }
            }
        });

        Off.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if(BA.isEnabled()){
```

Practical 24

```
                    BA.disable();
                    Toast.makeText(MainActivity.this, "BW turned Off",
Toast.LENGTH_SHORT).show();
                }else{
                    Toast.makeText(getApplicationContext(), "Already off",
Toast.LENGTH_LONG).show();
                }
            }
        });

        visible.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent getVisible = new
Intent(BluetoothAdapter.ACTION_REQUEST_DISCOVERABLE);
                startActivity(getVisible);
            }
        });

        devices.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(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(MainActivity.this,android.R.layout.simple_list_item_1, list);
                lv.setAdapter(adapter);
            }
        });


    }
}
```