**Practical Related Questions:**

1. **Name the methods which are used to enable and disable Bluetooth Adapter.**
2. enable()
3. disable()
4. **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.

1. **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.

**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>

**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()){  
 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);  
 }  
 });  
  
  
 }  
}