

❖Program_46_48

● Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
        android:padding="20dp">

        <!-- (46) Sum CheckBoxes -->
        <CheckBox
            android:id="@+id/cb400"
            android:text="400"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"/>

        <CheckBox
            android:id="@+id/cb700"
            android:text="700"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"/>

        <CheckBox
            android:id="@+id/cb900"
            android:text="900"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"/>

        <Button
            android:id="@+id/btnTotal"
            android:text="Calculate Total"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"/>

        <TextView
            android:id="@+id/txtTotal"
            android:text="Total: 0"
            android:textSize="18sp"
            android:layout_marginBottom="20dp"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"/>

        <!-- (47) Bold / Italic -->
        <CheckBox
            android:id="@+id/cbBold"
            android:text="Bold"
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"/>

<CheckBox
    android:id="@+id/cbItalic"
    android:text="Italic"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>

<TextView
    android:id="@+id/txtUniversity"
    android:text="Saurashtra University"
    android:textSize="20sp"
    android:layout_marginBottom="20dp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>

<!-- (48) ListView -->
<ListView
    android:id="@+id/listCities"
    android:layout_width="match_parent"
    android:layout_height="300dp"/>

</LinearLayout>
</ScrollView>

```

• MainActivity.kt

```

package com.example.program_46_48

import android.os.Bundle
import android.widget.*
import android.graphics.Typeface
import androidx.appcompat.app.AppCompatActivity

class MainActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        // (46) CheckBox Sum
        val cb400 = findViewById<CheckBox>(R.id.cb400)
        val cb700 = findViewById<CheckBox>(R.id.cb700)
        val cb900 = findViewById<CheckBox>(R.id.cb900)
        val btnTotal = findViewById<Button>(R.id.btnTotal)
        val txtTotal = findViewById<TextView>(R.id.txtTotal)

        btnTotal.setOnClickListener {
            var total = 0

```

```

        if (cb400.isChecked) total += 400
        if (cb700.isChecked) total += 700
        if (cb900.isChecked) total += 900
        txtTotal.text = "Total: $total"
    }

    // (47) Bold / Italic
    val cbBold = findViewById<CheckBox>(R.id.cbBold)
    val cbItalic = findViewById<CheckBox>(R.id.cbItalic)
    val txtUniversity = findViewById<TextView>(R.id.txtUniversity)

    fun applyStyle() {
        when {
            cbBold.isChecked && cbItalic.isChecked ->
                txtUniversity.setTypeface(null, Typeface.BOLD_ITALIC)
            cbBold.isChecked ->
                txtUniversity.setTypeface(null, Typeface.BOLD)
            cbItalic.isChecked ->
                txtUniversity.setTypeface(null, Typeface.ITALIC)
            else ->
                txtUniversity.setTypeface(null, Typeface.NORMAL)
        }
    }

    cbBold.setOnClickListener { applyStyle() }
    cbItalic.setOnClickListener { applyStyle() }

    // (48) ListView
    val listCities = findViewById<ListView>(R.id.listCities)
    val cities = resources.getStringArray(R.array.cities)

    val adapter = ArrayAdapter(
        this,
        android.R.layout.simple_list_item_1,
        cities
    )
    listCities.adapter = adapter

    listCities.setOnItemClickListener { _, _, position, _ ->
        Toast.makeText(
            this,
            cities[position],
            Toast.LENGTH_SHORT
        ).show()
    }
}
}

```

- **strings.xml**

```

<resources>
    <string name="app_name">Program_46_48</string>
    <string-array name="cities">
        <item>Rajkot</item>

```

```
<item>Ahmedabad</item>
<item>Surat</item>
<item>Vadodara</item>
<item>Jamnagar</item>
</string-array>
</resources>
```

