

Practical No. 3.A1

Aim: Write an Android program to demonstrate the working of different views (TextView, EditText, Button, ImageButton, ToggleButton, RadioGroup, RadioButton, CheckBox).

activity_main.xml

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

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <EditText
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/edtName"
            android:hint="Enter Name"
            android:textSize="20dp"/>

        <RadioGroup
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/rg">
            <RadioButton
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:id="@+id/rbFemale"
                android:text="Female"
                android:textSize="20dp"/>

            <RadioButton
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:id="@+id/rbMale"
                android:text="Male"
                android:textSize="20dp"/>

            <RadioButton
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:id="@+id/rbOther"
                android:text="Other"
                android:textSize="20dp"/>
        </RadioGroup>
    </LinearLayout>
</ScrollView>
```

```
<CheckBox
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/chbDance"
    android:text="Dancing"
    android:textSize="20dp"/>

<CheckBox
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/chbSing"
    android:text="Singing"
    android:textSize="20dp"/>

<CheckBox
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/chbRead"
    android:text="Reading"
    android:textSize="20dp"/>

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/btnOk"
    android:text="OK"
    android:textSize="20dp"/>

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/tvName"
    android:textSize="20dp"/>

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/tvGender"
    android:textSize="20dp"/>

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/tvHobbies"
    android:textSize="20dp"/>

<ImageButton
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/imgBtn"
    android:src="@mipmap/ic_launcher_round"/>
```

```

        <ToggleButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/tg"
            android:textSize="20dp"/>

    </LinearLayout>
</ScrollView>

```

MainActivity.kt

```
package com.example.lifecycle
```

```

import android.annotation.SuppressLint
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.util.Log
import android.widget.*

```

```
class MainActivity : AppCompatActivity() {
```

```
    @SuppressLint("MissingInflatedId")
```

```
    override fun onCreate(savedInstanceState: Bundle?) {
```

```
        super.onCreate(savedInstanceState)
```

```
        setContentView(R.layout.activity_main)
```

```
        val edtName = findViewById<EditText>(R.id.edtName)
```

```
        val rg = findViewById<RadioGroup>(R.id.rg)
```

```
        val rbMale = findViewById<RadioButton>(R.id.rbMale)
```

```
        val rbFemale = findViewById<RadioButton>(R.id.rbFemale)
```

```
        val rbOther = findViewById<RadioButton>(R.id.rbOther)
```

```
        val chbDance = findViewById<CheckBox>(R.id.chbDance)
```

```
        val chbSing = findViewById<CheckBox>(R.id.chbSing)
```

```
        val chbRead = findViewById<CheckBox>(R.id.chbRead)
```

```
        val btnOk = findViewById<Button>(R.id.btnOk)
```

```
        val tvName = findViewById<TextView>(R.id.tvName)
```

```
        val tvGender = findViewById<TextView>(R.id.tvGender)
```

```
        val tvHobbies = findViewById<TextView>(R.id.tvHobbies)
```

```
        val imgBtn = findViewById<ImageButton>(R.id.imgBtn)
```

```
        val tg = findViewById<ToggleButton>(R.id.tg)
```

```
        var s = ""
```

```
        btnOk.setOnClickListener {
```

```
            tvName.text = edtName.text
```

```
            if(rbMale.isChecked)
```

```
                tvGender.text = rbMale.text
```

```
            else if (rbFemale.isChecked)
```

```
                tvGender.text = rbFemale.text
```

```
            else
```

```
                tvGender.text = rbOther.text
```

```

        if(chbDance.isChecked)
            s = chbDance.text as String
        if(chbSing.isChecked)
            s = s + " " + chbSing.text as String
        if(chbRead.isChecked)
            s = s + " " + chbRead.text as String
        tvHobbies.text = s
    }

```

```

imgBtn.setOnClickListener {
    edtName.setText("")
    rbMale.isChecked = false
    rbFemale.isChecked = false
    rbOther.isChecked = false
    chbDance.isChecked = false
    chbSing.isChecked = false
    chbRead.isChecked = false
    tvName.setText("")
    tvGender.setText("")
    tvHobbies.setText("")
}

```

```

tg.setOnCheckedChangeListener { _, isChecked ->
    if(isChecked)
    {
        Toast.makeText(this, "Toggle Button is ON", Toast.LENGTH_LONG).show()
    }
    else
    {
        Toast.makeText(this, "Toggle Button is OFF", Toast.LENGTH_LONG).show()
    }
}
}
}
}

```

Output

