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"/>
    < Radio Group
      android:layout_width="wrap_content"
      android:layout height="wrap content"
      android:id="@+id/rg">
      < Radio Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/rbFemale"
        android:text="Female"
        android:textSize="20dp"/>
      < Radio Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/rbMale"
        android:text="Male"
        android:textSize="20dp"/>
      < Radio Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:id="@+id/rbOther"
        android:text="Other"
        android:textSize="20dp"/>
    </RadioGroup>
```

```
<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"/>
< Image Button
  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 = findViewBvId<TextView>(R.id.tvGender)
     val tvHobbies = findViewBvId<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





