

Practical – 5

Kotlin file –

```
package com.example.button_demo_2

import android.os.Bundle
import androidx.activity.ComponentActivity
import android.widget.*

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

        // References to UI elements from XML
        val editName: EditText = findViewById(R.id.editName)
        val btnSubmit: Button = findViewById(R.id.btnSubmit)
        val radioGroupGender: RadioGroup = findViewById(R.id.radioGroupGender)
        val checkBoxReading: CheckBox = findViewById(R.id.checkBoxReading)
        val checkBoxTraveling: CheckBox = findViewById(R.id.checkBoxTraveling)
        val checkBoxGaming: CheckBox = findViewById(R.id.checkBoxGaming)
        val autoCompleteTextView: AutoCompleteTextView = findViewById(R.id.autoCompleteTextView)
        val imageButton: ImageButton = findViewById(R.id.imageButton)
        val toggleButton: ToggleButton = findViewById(R.id.toggleButton)
        val textViewResult: TextView = findViewById(R.id.textViewResult)

        // AutoCompleteTextView setup (for countries)
        val countries = arrayOf("USA", "India", "Canada", "UK", "Australia")
        val adapter = ArrayAdapter(this, android.R.layout.simple_dropdown_item_1line, countries)
        autoCompleteTextView.setAdapter(adapter)

        // Button click listener to show result
        btnSubmit.setOnClickListener {
            // Get the name from EditText
            val name = editName.text.toString()

            // Get the selected gender from RadioGroup
            val genderId = radioGroupGender.checkedRadioButtonId
            val gender = if (genderId != -1) findViewById<RadioButton>(genderId)?.text else "Not
selected"

            // Collect hobbies from Checkboxes
```

```

val hobbies = mutableListOf<String>()
if (checkBoxReading.isChecked) hobbies.add("Reading")
if (checkBoxTraveling.isChecked) hobbies.add("Traveling")
if (checkBoxGaming.isChecked) hobbies.add("Gaming")

// Get selected country from AutoCompleteTextView
val country = autoCompleteTextView.text.toString()

// Get the ToggleButton state
val toggleState = if (toggleButton.isChecked) "ON" else "OFF"

// Display the result in TextView
textViewResult.text = ""
    Name: $name
    Gender: $gender
    Hobbies: ${hobbies.joinToString(", ")}
    Country: $country
    Toggle: $toggleState
"".trimIndent()
}

// ImageButton click listener (just to show a toast message)
ImageButton.setOnClickListener {
    Toast.makeText(this, "ImageButton clicked!", Toast.LENGTH_SHORT).show()
}
}
}

```

xml -

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp">

```

```
<!-- EditText -->
```

```
<EditText
```

```
    android:id="@+id/editTextName"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="Enter your name"  
    android:layout_marginBottom="16dp" />
```

```
<!-- RadioGroup with RadioButtons -->
```

```
<RadioGroup
```

```
    android:id="@+id/radioGroupGender"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:orientation="horizontal"  
    android:layout_marginBottom="16dp">
```

```
<RadioButton
```

```
    android:id="@+id/radioMale"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Male" />
```

```
<RadioButton
```

```
    android:id="@+id/radioFemale"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Female" />
```

```
</RadioGroup>
```

```
<!-- Submit Button -->
```

```
<Button
```

```
    android:id="@+id/btnSubmit"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginBottom="16dp"
```

```
        android:text="Submit" />
```

```
<!-- TextView for Hobbies -->
```

```
<TextView
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Select hobbies:"
```

```
    android:layout_marginBottom="8dp" />
```

```
<!-- CheckBoxes -->
```

```
<CheckBox
```

```
    android:id="@+id/checkBoxReading"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Reading" />
```

```
<CheckBox
```

```
    android:id="@+id/checkBoxTraveling"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Traveling" />
```

```
<CheckBox
```

```
    android:id="@+id/checkBoxGaming"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Gaming"
```

```
    android:layout_marginBottom="16dp" />
```

```
<!-- AutoCompleteTextView -->
```

```
<AutoCompleteTextView
```

```
    android:id="@+id/autoCompleteTextView"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:hint="Choose your country"
```

```
    android:layout_marginBottom="16dp" />
```

```
<!-- ImageButton -->
```

```
<ImageButton
```

```
    android:id="@+id/imageButton"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:src="@drawable/ic_launcher_foreground"
```

```
    android:contentDescription="Camera"
```

```
    android:layout_marginBottom="16dp" />
```

```
<!-- ToggleButton -->
```

```
<ToggleButton
```

```
    android:id="@+id/toggleButton"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:textOn="ON"
```

```
    android:textOff="OFF"
```

```
    android:layout_marginBottom="16dp" />
```

```
<!-- Result TextView -->
```

```
<TextView
```

```
    android:id="@+id/textViewResult"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Result will be shown here"
```

```
    android:textSize="16sp"
```

```
    android:textColor="#C33C3C"
```

```
    android:layout_marginTop="16dp"
```

```
    android:gravity="center" />
```

```
</LinearLayout>
```

