Java

```java
package com.example.lab6;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.ProgressBar;
import android.widget.RadioButton;
import android.widget.RatingBar;
import android.widget.SeekBar;
import android.widget.Spinner;
import android.widget.TextView;
import android.widget.Toast;
import android.widget.ToggleButton;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private TextView textView;
    private EditText editText;
    private Button button;
    private ImageView imageView;
    private CheckBox checkBox;
    private RadioButton radioButton;
    private ToggleButton toggleButton;
    private SeekBar seekBar;
    private RatingBar ratingBar;
    private ProgressBar progressBar;
    private Spinner spinner;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // Initialize UI components
        textView = findViewById(R.id.textView);
        editText = findViewById(R.id.editText);
        button = findViewById(R.id.button);
        imageView = findViewById(R.id.imageView);
        checkBox = findViewById(R.id.checkBox);
        radioButton = findViewById(R.id.radioButton);
        toggleButton = findViewById(R.id.toggleButton);
        seekBar = findViewById(R.id.seekBar);
```

```java
        ratingBar = findViewById(R.id.ratingBar);
        progressBar = findViewById(R.id.progressBar);
        spinner = findViewById(R.id.spinner);

        // Set up button click listener
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String editTextContent = editText.getText().toString();
                Toast.makeText(MainActivity.this, "Button clicked! EditText content: " + editTextContent,
Toast.LENGTH_SHORT).show();
            }
        });

        // Set up check box change listener
        checkBox.setOnCheckedChangeListener((buttonView, isChecked) -> {
            String message = isChecked ? "CheckBox checked!" : "CheckBox unchecked!";
            Toast.makeText(MainActivity.this, message, Toast.LENGTH_SHORT).show();
        });

        // Set up radio button change listener
        radioButton.setOnCheckedChangeListener((buttonView, isChecked) -> {
            if (isChecked) {
                Toast.makeText(MainActivity.this, "RadioButton checked!",
Toast.LENGTH_SHORT).show();
            }
        });

        // Set up toggle button change listener
        toggleButton.setOnCheckedChangeListener((buttonView, isChecked) -> {
            String message = isChecked ? "ToggleButton on!" : "ToggleButton off!";
            Toast.makeText(MainActivity.this, message, Toast.LENGTH_SHORT).show();
        });

        // Set up seek bar change listener
        seekBar.setOnSeekBarChangeListener(new SeekBar.OnSeekBarChangeListener() {
            @Override
            public void onProgressChanged(SeekBar seekBar, int progress, boolean fromUser) {
                textView.setText("SeekBar progress: " + progress);
            }

            @Override
            public void onStartTrackingTouch(SeekBar seekBar) {
                // Do something when the touch tracking starts
            }

            @Override
            public void onStopTrackingTouch(SeekBar seekBar) {
```

```java
        // Do something when the touch tracking stops
      }
    });

    // Set up rating bar change listener
    ratingBar.setOnRatingBarChangeListener((ratingBar, rating, fromUser) -> {
      Toast.makeText(MainActivity.this, "Rating: " + rating, Toast.LENGTH_SHORT).show();
    });

    // ProgressBar example usage
    progressBar.setProgress(50); // Set initial progress to 50%

    // Spinner setup can be added here (e.g., using an ArrayAdapter)
  }
}
```

xml

```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:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical"
  android:padding="16dp">

  <TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="TextView"
    android:textSize="18sp"
    android:textStyle="bold"
    android:layout_gravity="center_horizontal"
    android:layout_marginBottom="16dp"/>

  <EditText
    android:id="@+id/editText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="EditText"
    android:layout_marginBottom="16dp"/>

  <Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
```

```xml
    android:layout_height="wrap_content"
    android:text="Button"
    android:layout_gravity="center_horizontal"
    android:layout_marginBottom="16dp"/>

<ImageView
    android:id="@+id/imageView"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:src="@drawable/ic_launcher_foreground"
    android:layout_marginBottom="16dp"/>

<CheckBox
    android:id="@+id/checkBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="CheckBox"
    android:layout_marginBottom="16dp"/>

<RadioButton
    android:id="@+id/radioButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="RadioButton"
    android:layout_marginBottom="16dp"/>

<ToggleButton
    android:id="@+id/toggleButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="ToggleButton"
    android:layout_gravity="center_horizontal"
    android:layout_marginBottom="16dp"/>

<SeekBar
    android:id="@+id/seekBar"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginBottom="16dp"/>

<RatingBar
    android:id="@+id/ratingBar"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"
    android:layout_marginBottom="16dp"/>

<ProgressBar
```

```xml
        android:id="@+id/progressBar"
        style="?android:attr/progressBarStyleHorizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginBottom="16dp"/>


    <Spinner
        android:id="@+id/spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginBottom="16dp"/>
</LinearLayout>
```