

ACTIVITY.MAIN.XML

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
    <application android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity"
            android:exported="true"> <intent-filter>
            <action android:name="android.intent.action.MAIN" />
            <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter> </activity> </application> </manifest>
```

MainActivity.java

```
package com.example.myapplication;
import android.content.DialogInterface;
import android.graphics.Color;
import android.graphics.Typeface;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toast;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import com.google.android.material.color.MaterialColors;
import java.util.ArrayList;
import java.util.List;
public class MainActivity extends AppCompatActivity {
    private TextView textView;
    private Button changeColorButton;
    private Button changeFontButton;
    @Override protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        textView = findViewById(R.id.textView);
        changeColorButton = findViewById(R.id.changeColorButton);
        changeFontButton = findViewById(R.id.changeFontButton);
        changeColorButton.setOnClickListener(new View.OnClickListener() {
            @Override public void onClick(View v) {
                showColorPicker();});
        changeFontButton.setOnClickListener(new View.OnClickListener() {
            @Override public void onClick(View v) {
                showFontPicker();});
        private void showColorPicker() {
            final List<String> colors = new ArrayList<>();
            colors.add("Red"); colors.add("Blue");
            colors.add("Black"); colors.add("Yellow");
            AlertDialog.Builder builder = new AlertDialog.Builder(this);
            builder.setTitle("Choose a Color")
                .setItems(colors.toArray(new String[0]), new DialogInterface.OnClickListener() {
```

```

@Override
public void onClick(DialogInterface dialog, int which) {
    switch (which) {
        case 0: textView.setTextColor(Color.RED); break;
        case 1: textView.setTextColor(Color.GREEN); break;
        case 2: textView.setTextColor(Color.BLUE); break;
        case 3: textView.setTextColor(Color.BLACK); break;
        case 4: textView.setTextColor(Color.YELLOW); break; }
    Toast.makeText(MainActivity.this, "Color changed!", Toast.LENGTH_SHORT).show(); } });
builder.show(); }
private void showFontPicker() {
    final List<String> fonts = new ArrayList<>();
    fonts.add("Normal"); fonts.add("Bold");
    fonts.add("Italic");
    fonts.add("Monospace");
    AlertDialog.Builder builder = new AlertDialog.Builder(this);
    builder.setTitle("Choose a Font")
        .setItems(fonts.toArray(new String[0]), new DialogInterface.OnClickListener() {
            @Override public void onClick(DialogInterface dialog, int which) {
                switch (which) {
                    case 0: textView.setTypeface(Typeface.DEFAULT); break;
                    case 1: textView.setTypeface(Typeface.DEFAULT_BOLD); break;
                    case 2: textView.setTypeface(Typeface.defaultFromStyle(Typeface.ITALIC)); break;
                    case 3: textView.setTypeface(Typeface.MONOSPACE); break; }
                Toast.makeText(MainActivity.this, "Font changed!", Toast.LENGTH_SHORT).show(); } });
    builder.show(); } }

```

activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp">
    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="20dp"
        android:text="221501511"
        android:textSize="24sp" />
    <Button android:id="@+id/changeColorButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Change Color"
        android:layout_centerHorizontal="true"
        android:layout_below="@id/textView"/>
    <Button android:id="@+id/changeFontButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Change Font"
        android:layout_centerHorizontal="true"
        android:layout_below="@id/changeColorButton"
        android:layout_marginTop="16dp"/>
</RelativeLayout>

```

