CORRECTION TP01

Matière : ATELIER DEVELOPPEMENT MOBILES 1 | **Classe : SEM21**

strings.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="app_name">ConversionTemperature</string>
    <string name="action_settings">Settings</string>
    <string name="dc">°C</string>
    <string name="dcAdf">°C -> °F</string>
    <string name="df">°F</string>
    <string name="dfAdc">°F -> °C</string>
</resources>
```

activity_main.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >
    <LinearLayout
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:orientation="vertical" >
        <LinearLayout
            android:layout_width="fill_parent"
            android:layout_height="wrap_content" >

            <EditText
                android:id="@+id/edC"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:ems="10"
                android:inputType="number" />
            <requestFocus />
            <TextView
                android:id="@+id/TextView01"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="@string/dc" />
            <Button
                        android:id="@+id/btnCF"
```

```
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="@string/dcAdf" />
        </LinearLayout>
        <LinearLayout
            android:layout_width="fill_parent"
            android:layout_height="wrap_content" >
            <EditText
                android:id="@+id/edF"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:ems="10"
                android:inputType="number" >
            </EditText>
            <TextView
                android:id="@+id/textView2"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="@string/df" />
            <Button
                android:id="@+id/btnFC"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="@string/dfAdc" />
        </LinearLayout>
    </LinearLayout>
</RelativeLayout>
```

MainActivity.java

```
package com.conversiontemperature;
import android.app.Activity;
import android.graphics.Color;
import android.os.Bundle;
import android.view.KeyEvent;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.view.View.OnKeyListener;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends Activity {
        // attributs
        private EditText edC;
        private EditText edF;
        private Button btnCF;
        private Button btnFC;
        @Override
        protected void onCreate(Bundle savedInstanceState) {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.activity_main);
                init();
        }
```

```
private void init() {
	edC = (EditText) findViewById(R.id.edC);
	edF = (EditText) findViewById(R.id.edF);
	btnCF = (Button) findViewById(R.id.btnCF);
	btnFC = (Button) findViewById(R.id.btnFC);
	ajouterEcouteur();
}
private void ajouterEcouteur() {
	btnCF.setOnClickListener(new OnClickListener() {

		@Override
		public void onClick(View arg0) {
			convertirDC_DF();

		}
	});
	btnFC.setOnClickListener(new OnClickListener() {

		@Override
		public void onClick(View arg0) {
			convertirDF_DC();

		}
	});
	edC.setOnKeyListener(new OnKeyListener() {

		@Override
		public boolean onKey(View v, int keyCode, KeyEvent event) {
			convertirDC_DF();
			return false;
		}
	});
	edF.setOnKeyListener(new OnKeyListener() {
		@Override
		public boolean onKey(View v, int keyCode, KeyEvent event) {
			convertirDF_DC();
			return false;
		}
	});

}
protected void convertirDC_DF() {
	if(!edC.getText().toString().isEmpty()){
		float c = Float.parseFloat(edC.getText().toString());
		float f = (c * 9) / 5 + 32;
		edF.setText(f + "");
		colorer();
	}
}
```

```
	protected void convertirDF_DC() {
		if(!edF.getText().toString().isEmpty()){
			float f = Float.parseFloat(edF.getText().toString());
			float c = (f - 32) * 5 / 9;
			edC.setText(c + "");
			colorer();
		}
	}

	private void colorer() {
		if(!edC.getText().toString().isEmpty()){
			float c = Float.parseFloat(edC.getText().toString());
			if (c <= 0) {
				edC.setTextColor(Color.WHITE);
				edC.setBackgroundColor(Color.BLACK);
				edF.setTextColor(Color.WHITE);
				edF.setBackgroundColor(Color.BLACK);
			} else if (c <= 20) {
				edC.setTextColor(Color.BLUE);
				edC.setBackgroundColor(Color.WHITE);
				edF.setTextColor(Color.BLUE);
				edF.setBackgroundColor(Color.WHITE);
			} else if (c <= 30) {
				edC.setTextColor(Color.YELLOW);
				edC.setBackgroundColor(Color.GREEN);
				edF.setTextColor(Color.YELLOW);
				edF.setBackgroundColor(Color.GREEN);
			} else {
				edC.setTextColor(Color.RED);
				edC.setBackgroundColor(Color.GRAY);
				edF.setTextColor(Color.RED);
				edF.setBackgroundColor(Color.GRAY);
			}
		}

	}

}
```