

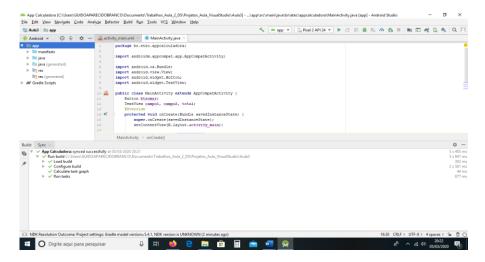


Curso Android Studio

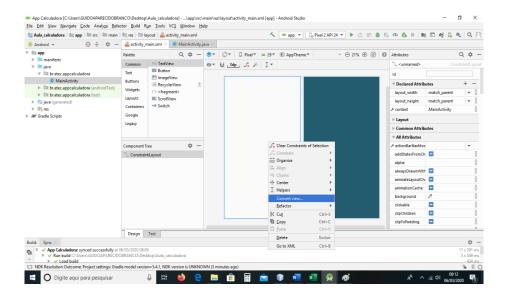
Aula 5

Criando um aplicativo para realizar cálculos básicos

Vamos criar um projeto novo com o nome App Calculadora no Android Studio:

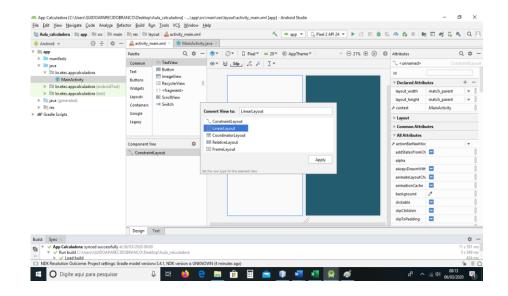


Escolher um tipo de Layouts Linear Layout Vertical:

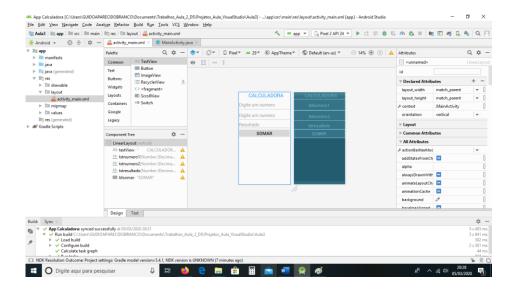








Adicionar ao projeto os componentes como mostra a figura:



1º TextView – Alterar as propriedades:

Text – CALCULADORA;

TextSize -40sp;

TextColor - #2196F3;

2º e 3º TextView Número Decimal – Alterar as propriedades:

Text – Deixar sem texto;

TextSize -40sp;

TextColor - #2196F3;

Hint - Digite um número;

Id - txtnumero1 (para o 2° textview) e txtnumero2 (para o 3° textview);





```
4º TextView Número Decimal – Alterar as propriedades:
Text – Deixar sem texto;
TextSize -40sp;
TextColor - #2196F3;
Hint - Resultado;
Id – txtresultado;
1º Button - Alterar as propriedades:
Text - Somar;
TextSize -36sp;
Id − btsomar;
XML
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout</pre>
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:orientation="vertical"
    tools:context=".MainActivity" >
    <TextView
        android:id="@+id/textView"
        android:layout width="match parent"
        android:layout_height="58dp"
        android:text="
                               CALCULADORA"
        android: textColor="#2196F3"
        android:textSize="40sp" />
    <EditText
        android:id="@+id/txtnumero1"
        android:layout width="match parent"
        android:layout height="88dp"
        android:ems="10"
        android:hint="Digite um numero"
        android:inputType="numberDecimal"
        android:textColor="#2196F3"
        android:textSize="36sp" />
    <EditText
        android:id="@+id/txtnumero2"
        android:layout width="match parent"
        android:layout height="79dp"
        android:ems="10"
        android:hint="Digite um numero"
        android:inputType="numberDecimal"
        android:textColor="#2196F3"
        android:textSize="36sp" />
```





```
<EditText
        android:id="@+id/txtresultado"
        android:layout width="match parent"
        android:layout height="69dp"
        android:ems="10"
        android:hint="Resultado"
        android:inputType="numberDecimal"
        android:textColor="#2196F3"
        android:textSize="36sp" />
    <Button
        android:id="@+id/btsomar"
        android:layout_width="match_parent"
        android:layout height="67dp"
        android: text="SOMAR"
        android:textSize="36sp" />
</LinearLayout>
```

Classe MainActivity

```
package br.etec.appcalculadora;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
   Button btsomar;
   TextView campo1, campo2, total;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        btsomar = (Button) findViewById(R.id.btsomar);
        campo1 = (TextView) findViewById(R.id.txtnumero1);
        campo2 = (TextView) findViewById(R.id.txtnumero2);
        total = (TextView) findViewById(R.id.txtresultado);
        btsomar.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
               double n1 = Double.parseDouble( campo1.getText().toString());
               double n2 = Double.parseDouble( campo2.getText().toString());
               double resp = n1 + n2;
               total.setText(String.valueOf( resp));
        });
```





Continuar com as operações.

Acrescentar os botões: Subtrair, dividir, multiplicar, cancelar.

2º Button - Alterar as propriedades:

Text – Subtrair;

TextSize -36sp;

Id – btsubtrair;

3º Button - Alterar as propriedades:

Text – dividir;

TextSize -36sp;

Id – btdividir;

4º Button - Alterar as propriedades:

Text – multiplicar;

TextSize -36sp;

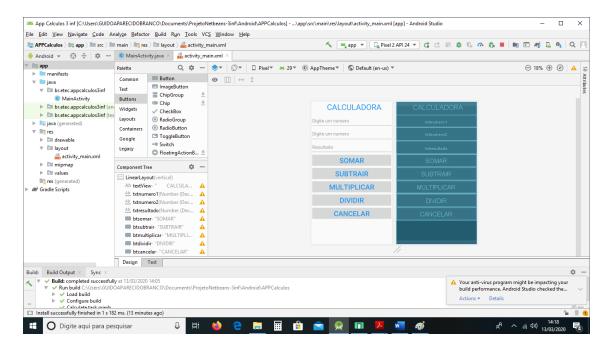
Id – btmultiplicar;

5° Button - Alterar as propriedades:

Text – cancelar;

TextSize -36sp;

Id – btcancelar;







```
botaosubtrair.setOnClickListener(new View.OnClickListener() {
            @Override
     public void onClick(View v) {
        double n1 = Double.parseDouble(numero1.getText().toString());
        double n2 = Double.parseDouble(numero2.getText().toString());
        double resp = n1 - n2;
        total.setText(String.valueOf(resp));
        });
        botaomultiplicar.setOnClickListener(new View.OnClickListener()
{
            @Override
      public void onClick(View v) {
        double n1 = Double.parseDouble(numero1.getText().toString());
        double n2 = Double.parseDouble(numero2.getText().toString());
        double resp = n1 * n2;
        total.setText(String.valueOf(resp));
        });
     botaodividir.setOnClickListener(new View.OnClickListener() {
            @Override
      public void onClick(View v) {
         double n1 = Double.parseDouble(numero1.getText().toString());
         double n2 = Double.parseDouble(numero2.getText().toString());
                if (n2 != 0) {
                    double resp = n1 / n2;
                    total.setText(String.valueOf(resp));
                } else {
                    total.setText("Não existe divisão por zero!!");
            }
        });
        botaocancelar.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                numero1.setText("");
                numero2.setText("");
                total.setText("");
        });
    }
<Button
    android:id="@+id/btsubtrair"
    android:layout width="match parent"
    android:layout height="wrap content"
    android:text="SUBTRAIR"
    android:textColor="#2196F3"
    android:textSize="36sp" />
```





<Button

```
android:id="@+id/btmultiplicar"
    android:layout width="match parent"
    android:layout_height="wrap_content"
    android:text="MULTIPLICAR"
    android:textColor="#2196F3"
    android:textSize="36sp" />
<Button
    android:id="@+id/btdividir"
    android:layout_width="match_parent"
    android: layout_height="wrap_content"
    android:text="DIVIDIR"
    android:textColor="#2196F3"
    android:textSize="36sp" />
<Button
    android:id="@+id/btcancelar"
    android:layout width="match parent"
    android: layout height="wrap content"
    android:text="CANCELAR"
    android:textColor="#2196F3"
```

android:textSize="36sp" />