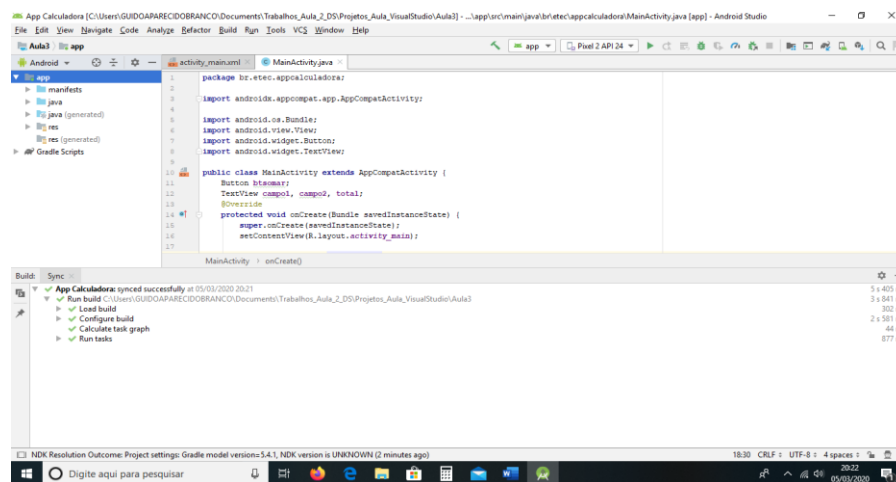


Curso Android Studio

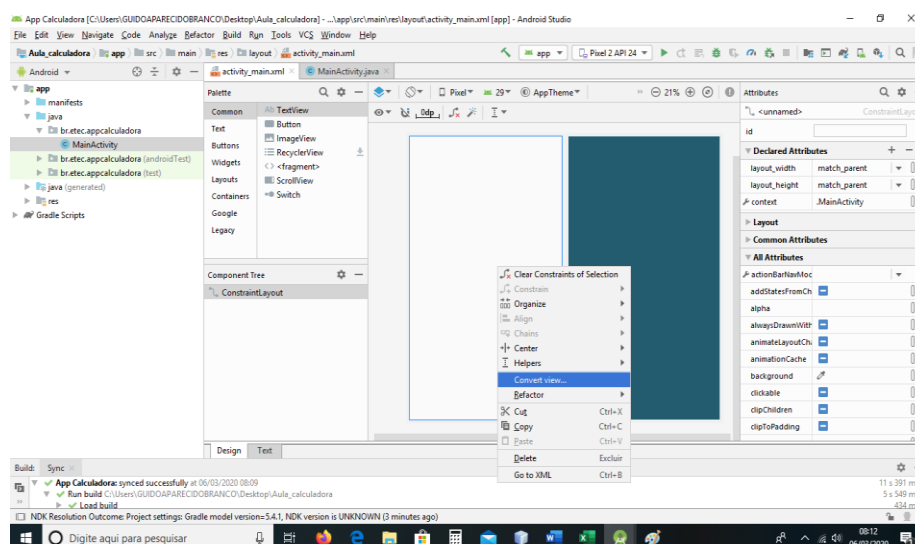
Aula 5

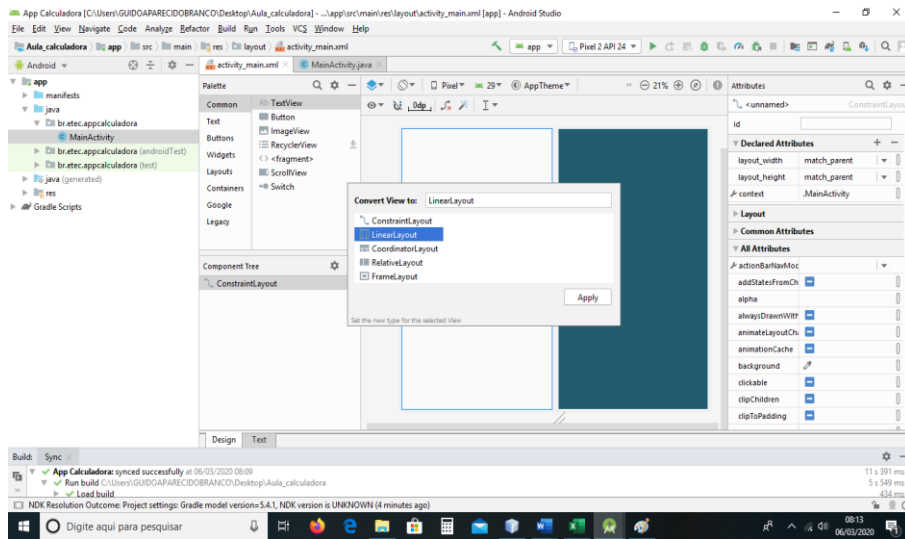
Criando um aplicativo para realizar cálculos básicos

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

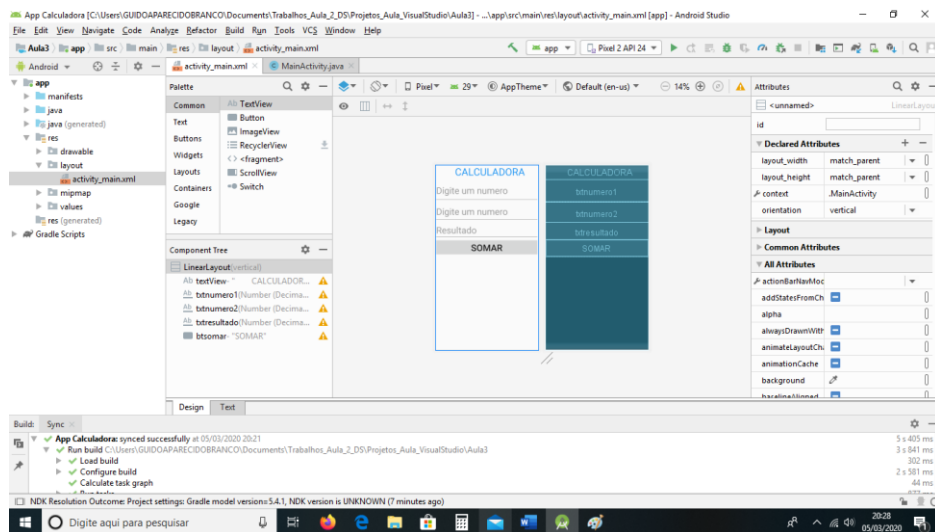


Escolher um tipo de Layouts LinearLayout Vertical:





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 2º textview) e txtnumero2 (para o 3º 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
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;

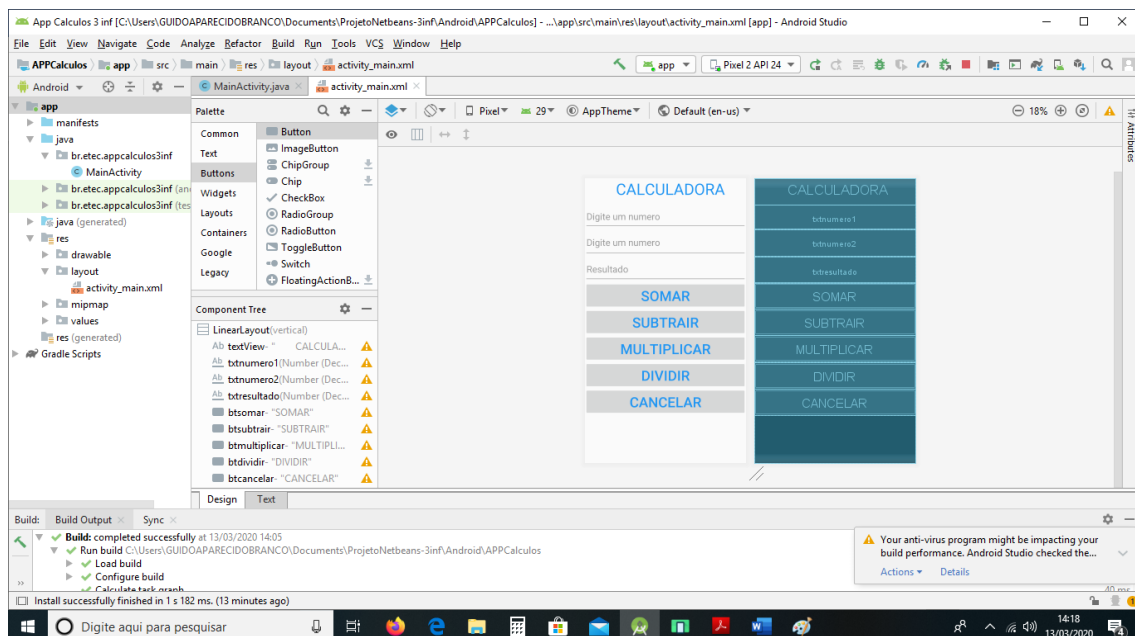
Id – btmultiplicar;

5º 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" />
```