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| File  New  New project  Escolha “Empty Activity” (next)    Clique no botão **FINISH** | |
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| **CRIANDO ALGUNS RECURSOS DE INTERFACE**  Clique sobre a opção  RES  DRAWABLE (botão direito)  escolher Drawable resource File  **input.xml**  **shape**  <shape xmlns:android="http://schemas.android.com/apk/res/android"  android:shape="rectangle">  <solid android:color="@color/white" />  <corners android:radius="15dp"/> </shape> |
| Clique sobre a opção  RES  DRAWABLE (botão direito)  escolher Drawable resource File  **file: background**  **selector: shape**  <?xml version="1.0" encoding="utf-8"?>  <shape xmlns:android="http://schemas.android.com/apk/res/android"  android:shape="rectangle">  <gradient  android:startColor="@color/teal\_200"   android:endColor=“@color/purple\_500"  android:angle=“90”  /> </shape> |
| res  values  strings.xml  <resources>  <string name="app\_name">CalculaIMC</string> </resources>  res  drawable  arraste o arquivo **nutricao.png** (figura da maça) |

**ACTIVITY (layout)**

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| **RES**  **layout**  **activity\_main.xml**  <?xml version="1.0" encoding="utf-8"?> <androidx.constraintlayout.widget.ConstraintLayout 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:id="@+id/layout"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:background="@drawable/background"  tools:context=".MainActivity">    <ImageView  android:id="@+id/imageView"  android:layout\_width="101dp"  android:layout\_height="98dp"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toTopOf="parent"  app:srcCompat="@drawable/nutricao" />   <TextView  android:id="@+id/textView"  android:layout\_width="207dp"  android:layout\_height="47dp"  android:layout\_marginStart="72dp"  android:layout\_marginTop="44dp"  android:layout\_marginEnd="16dp"  android:fontFamily="cursive"  android:text="NUTRILIFE"  android:textSize="34sp"  android:textStyle="bold"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintStart\_toEndOf="@+id/imageView"  app:layout\_constraintTop\_toTopOf="parent" />   <TextView  android:id="@+id/textView2"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:text="NOME"  android:textSize="16sp"  android:textStyle="bold"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/imageView" />   <EditText  android:id="@+id/edtnome"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:layout\_marginEnd="16dp"  android:background="@drawable/input"  android:ems="10"  android:inputType="textPersonName"  android:minHeight="48dp"  android:paddingStart="8dp"  android:textAppearance="@style/TextAppearance.AppCompat.Body1"  android:textColor="#090909"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/textView2"  tools:ignore="SpeakableTextPresentCheck" />   <TextView  android:id="@+id/textView3"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:text="Peso"  android:textSize="16sp"  android:textStyle="bold"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/edtnome" />   <TextView  android:id="@+id/textView5"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginTop="16dp"  android:text="Altura"  android:textSize="16sp"  android:textStyle="bold"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintStart\_toEndOf="@+id/textView3"  app:layout\_constraintTop\_toBottomOf="@+id/edtnome" />   <EditText  android:id="@+id/edtpeso"  android:layout\_width="176dp"  android:layout\_height="48dp"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:background="@drawable/input"  android:ems="10"  android:inputType="textPersonName"  android:paddingStart="8dp"  android:textColor="#0B0B0B"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/textView3"  tools:ignore="SpeakableTextPresentCheck" />   <EditText  android:id="@+id/edtaltura"  android:layout\_width="176dp"  android:layout\_height="48dp"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:layout\_marginEnd="16dp"  android:background="@drawable/input"  android:ems="10"  android:inputType="textPersonName"  android:paddingStart="8dp"  android:textColor="#0C0C0C"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintStart\_toEndOf="@+id/edtpeso"  app:layout\_constraintTop\_toBottomOf="@+id/textView5"  tools:ignore="SpeakableTextPresentCheck" />   <TextView  android:id="@+id/textView6"  android:layout\_width="0dp"  android:layout\_height="wrap\_content"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:text="Sexo"  android:textSize="16sp"  android:textStyle="bold"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintHorizontal\_bias="0.069"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/edtpeso" />   <RadioGroup  android:id="@+id/grupo"  android:layout\_width="0dp"  android:layout\_height="78dp"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:layout\_marginEnd="16dp"  android:background="#023F51B5"  android:backgroundTint="#3F51B5"  android:hapticFeedbackEnabled="false"  android:orientation="horizontal"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintHorizontal\_bias="1.0"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/textView6">   <RadioButton  android:id="@+id/rdmasculino"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:backgroundTint="#3F51B5"  android:text="Masculino"  tools:layout\_editor\_absoluteX="36dp"  tools:layout\_editor\_absoluteY="511dp" />   <RadioButton  android:id="@+id/rdfeminino"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:backgroundTint="#3F51B5"  android:text="Feminino"  tools:layout\_editor\_absoluteX="36dp"  tools:layout\_editor\_absoluteY="511dp" />   </RadioGroup>   <Button  android:id="@+id/btncalcular"  android:layout\_width="0dp"  android:layout\_height="wrap\_content"  android:layout\_marginStart="16dp"  android:layout\_marginTop="16dp"  android:layout\_marginEnd="16dp"  android:layout\_marginBottom="218dp"  android:backgroundTint="@color/purple\_700"  android:text="Calcular"  app:layout\_constraintBottom\_toBottomOf="parent"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintHorizontal\_bias="0.471"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/grupo" />   </androidx.constraintlayout.widget.ConstraintLayout> |

**Código java MainActivity.java**

public class MainActivity extends AppCompatActivity {  
 Button btncalcular;  
 RadioGroup grupo;  
 EditText edtnome, edtpeso, edtaltura;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 edtnome = findViewById(R.id.*edtnome*);  
 edtpeso = findViewById(R.id.*edtpeso*);  
 edtaltura = findViewById(R.id.*edtaltura*);  
 btncalcular = findViewById(R.id.*btncalcular*);  
 grupo = findViewById(R.id.*rbgrupo*);  
 btncalcular.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 double imc;  
 String msg;  
 double peso = Double.*parseDouble*(edtpeso.getText().toString());  
 double altura = Double.*parseDouble*(edtaltura.getText().toString());  
 imc = peso/(altura\*altura);  
 int opcao = grupo.getCheckedRadioButtonId();  
 if (opcao==R.id.*rbmasculino*){  
 if (imc < 20){  
 msg = "Abaixo do normal";  
 } else if ((imc >= 20) && (imc <= 24.9)){  
 msg = "Normal";  
 }else if ((imc>24.9)&&(imc <=29.9)){  
 msg="Obesidade leve";  
 } else if ((imc >29.9)&&(imc<=43)){  
 msg ="Obesidade moderada";  
 } else msg ="Obesidade Morbida";  
 }

else

{ // radio Buttom FEMININO

if (imc < 19){  
 msg = "Abaixo do normal";  
 } else if ((imc >= 19) && (imc <= 23.9)){  
 msg = "Normal";  
 }else if ((imc>23.9)&&(imc <=28.9)){  
 msg="Obesidade leve";  
 } else if ((imc >28.9)&&(imc<=39)){  
 msg ="Obesidade moderada";  
 } else msg ="Obesidade Morbida";  
 }  
 AlertDialog.Builder janela=new AlertDialog.Builder(MainActivity.this);  
 janela.setTitle(R.string.*app\_name*);  
 janela.setMessage(String.*format*("IMC = %.2f\n %s\n",imc,msg));  
 janela.setNeutralButton("OK",null);  
 janela.show();  
 }  
 });  
 }