**Lista 1º bimestre – Enzo Dante**

**Ex1:**

package com.example.lista1\_ex1  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.EditText  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var button: Button = findViewById(R.id.*button*)  
  
 button.setOnClickListener **{** var nome: EditText = findViewById(R.id.*editText0*)  
 var nota1: EditText = findViewById(R.id.*editText1*)  
 var nota2: EditText = findViewById(R.id.*editText2*)  
  
 var media = (nota1.*text*.toString().*toFloat*() + nota2.*text*.toString().*toFloat*()) / 2  
  
 var text: TextView = findViewById(R.id.*texto*)  
 if(media >= 6)  
 text.*text* = "${nome.*text*.toString()} foi aprovado! média: ${media.toString()}"  
 else  
 text.*text* = "${nome.*text*.toString()} foi reprovado! média: ${media.toString()}"  
  
 **}** }  
  
}

**Ex2:**

package com.example.lista1\_ex2  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.EditText  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var button: Button = findViewById(R.id.*button*)  
  
 button.setOnClickListener **{** var num: EditText = findViewById(R.id.*editText1*)  
 var tabuada: TextView = findViewById(R.id.*texto*)  
 tabuada.*text* = ""  
  
 var texts: String = ""  
  
 for (i in 0..10){  
 texts += "${num.*text*.toString()} \* ${i} = ${(num.*text*.toString().*toInt*() \* i).toString()}\n"  
 }  
 tabuada.*text* = texts  
 **}** }  
}

**Ex3:**

package com.example.lista1\_ex3  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.CheckBox  
import android.widget.EditText  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var checkbox: CheckBox = findViewById(R.id.*checkBox*)  
  
 checkbox.setOnCheckedChangeListener **{** buttonView, isChecked **->** var texto: TextView = findViewById(R.id.*texto*)  
 if(isChecked){  
 var msg: EditText = findViewById(R.id.*editText1*)  
 texto.*text* = msg.*text*.toString().*uppercase*()

}  
 else  
 texto.*text* = ""  
 **}** }  
}

**Ex4:**

package com.example.lista1\_ex4  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.CheckBox  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var checbox1: CheckBox = findViewById(R.id.*checkBox1*)  
 var checbox2: CheckBox = findViewById(R.id.*checkBox2*)  
 var checbox3: CheckBox = findViewById(R.id.*checkBox3*)  
 var checbox4: CheckBox = findViewById(R.id.*checkBox4*)  
 var checbox5: CheckBox = findViewById(R.id.*checkBox5*)  
  
 var texto: TextView = findViewById(R.id.*texto*)  
 texto.*text* = ""  
 var valor: Float = 0.0F  
  
 checbox1.setOnCheckedChangeListener **{** buttonview, isChecked **->** if(isChecked){  
 valor += 20.00F  
 texto.*text* = "R$ ${valor}"  
 }  
 else{  
 valor -= 20.00F  
 texto.*text* = "R$ ${valor}"  
 }  
  
 **}** checbox2.setOnCheckedChangeListener **{** buttonview, isChecked **->** if(isChecked){  
 valor += 5.95F  
 texto.*text* = "R$ ${valor}"  
 }  
 else{  
 valor -= 5.95F  
 texto.*text* = "R$ ${valor}"  
 }  
 **}** checbox3.setOnCheckedChangeListener **{** buttonview, isChecked **->** if(isChecked){  
 valor += 76.78F  
 texto.*text* = "R$ ${valor}"  
 }  
 else{  
 valor -= 76.78F  
 texto.*text* = "R$ ${valor}"  
 }  
 **}** checbox4.setOnCheckedChangeListener **{** buttonview, isChecked **->** if(isChecked){  
 valor += 9.38F  
 texto.*text* = "R$ ${valor}"  
 }  
 else{  
 valor -= 9.38F  
 texto.*text* = "R$ ${valor}"  
 }  
 **}** checbox5.setOnCheckedChangeListener **{** buttonview, isChecked **->** if(isChecked){  
 valor += 12.00F  
 texto.*text* = "R$ ${valor}"  
 }  
 else{  
 valor -= 12.00F  
 texto.*text* = "R$ ${valor}"  
 }  
 **}** }  
}

**Ex5:**

package com.example.lista1\_ex5  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.EditText  
import android.widget.RadioButton  
import android.widget.RadioGroup  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var radiobutton: RadioGroup = findViewById(R.id.*radiogroup1*)  
  
 radiobutton.setOnCheckedChangeListener **{** radioGroup, i **->** var salario: EditText = findViewById(R.id.*editText1*)  
 var texto: TextView = findViewById(R.id.*texto*)  
 // i é o id do componente  
 if(i == 2131231060){  
 texto.*text* = "novo salário é\nR$ ${salario.*text*.toString().*toFloat*() + (salario.*text*.toString().*toFloat*() \* 0.40)}"  
 }  
 else if(i == 2131231061){  
 texto.*text* = "novo salário é\nR$ ${salario.*text*.toString().*toFloat*() + (salario.*text*.toString().*toFloat*() \* 0.45)}"  
 }else{  
 texto.*text* = "novo salário é\nR$ ${salario.*text*.toString().*toFloat*() + (salario.*text*.toString().*toFloat*() \* 0.50)}"  
 }  
  
 **}** }  
}

**Ex6:**

package com.example.lista1\_ex6  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.EditText  
import android.widget.RatingBar  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var total = 0  
 var valores = 0.0F  
  
 var button: Button = findViewById(R.id.*button*)  
 button.setOnClickListener **{** var texto: TextView = findViewById(R.id.*texto*)  
 var num: EditText = findViewById(R.id.*editText1*)  
  
 if(num.*text*.toString().*toFloat*() >= 0 && num.*text*.toString().*toFloat*() <= 10) {  
 valores += num.*text*.toString().*toFloat*()  
 total++  
  
 var ratingbar: RatingBar = findViewById(R.id.*ratingBar*)  
 ratingbar.*rating* = valores / total  
  
 texto.*text* = "Você digitou ${total.toString()} vezes"  
 }  
 else  
 texto.*text* = "Digite um valor entre 0 e 10!"  
  
 **}** }  
}

**Ex7:**

package com.example.lista1\_ex7  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.view.View  
import android.widget.Button  
import android.widget.EditText  
import android.widget.LinearLayout  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var button: Button = findViewById(R.id.*buton*)  
 button.setOnClickListener **{** var texto: EditText = findViewById(R.id.*editText1*)  
 criarText(texto)  
  
 **}** }  
  
 fun criarText(msg: EditText){  
 var linearLayout: LinearLayout = findViewById(R.id.*linearLayout*)  
 var Textview = TextView(this)  
 Textview.*layoutParams* = LinearLayout.LayoutParams(  
 LinearLayout.LayoutParams.*MATCH\_PARENT*,  
 LinearLayout.LayoutParams.*WRAP\_CONTENT* )  
 Textview.*text* = msg.*text*.toString()  
 linearLayout.addView(Textview)  
  
 }  
}

**Ex8:**

package com.example.lista1\_ex8  
  
import android.content.Intent  
import android.graphics.Color  
import android.icu.text.ListFormatter.Width  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.GridLayout  
import android.widget.LinearLayout  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
  
  
  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var btn: Button = findViewById(R.id.*btn*)  
 btn.setOnClickListener **{** iniciarJogo()  
 **}** }  
  
 fun iniciarJogo(){  
 val layoutPrincipal: LinearLayout = findViewById(R.id.*linearLayout*)  
 layoutPrincipal.removeAllViews()  
   
 for(j in 1..5){  
 val linearLayout = LinearLayout(this)  
 linearLayout.*orientation* = LinearLayout.*HORIZONTAL* for(i in 1..4){  
 val button = Button(this)  
 button.*layoutParams* = LinearLayout.LayoutParams(  
 LinearLayout.LayoutParams.*WRAP\_CONTENT*,  
 LinearLayout.LayoutParams.*WRAP\_CONTENT* )  
 button.*text* = "-"  
 button.setOnClickListener **{** var numB = (0..5).*random*()  
 button.*isEnabled* = false  
 if(numB == 1){  
 button.setBackgroundColor(Color.*RED*)  
 }else{  
 button.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** linearLayout.addView(button)  
 }  
  
 layoutPrincipal.addView(linearLayout)  
 }  
 }  
}

**Ex9:**

package com.example.lista1\_ex9  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.LinearLayout  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 var vezesJogada: Int = 0  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
 var textom: TextView = findViewById(R.id.*textov*)  
  
 var xvez: Boolean  
 var btn1: Button = findViewById(R.id.*btn1*)  
  
 btn1.setOnClickListener **{** textom.*text* = ""  
 vezesJogada = 0  
 xvez = true  
 criarTabuleiro(xvez)  
 **}** }  
 fun criarTabuleiro(xvez:Boolean){  
 var vez = xvez  
 var tabuleiro = Array(3) **{**IntArray(3)**}** val layoutPrincipal: LinearLayout = findViewById(R.id.*linearl*)  
 layoutPrincipal.removeAllViews()  
  
 for(j in 1..3){  
 val linearLayout = LinearLayout(this)  
 linearLayout.*orientation* = LinearLayout.*HORIZONTAL* for(i in 1..3){  
 val button = Button(this)  
 button.*layoutParams* = LinearLayout.LayoutParams(  
 LinearLayout.LayoutParams.*WRAP\_CONTENT*,  
 LinearLayout.LayoutParams.*WRAP\_CONTENT* )  
 button.*text* = "-"  
 button.setOnClickListener **{** vezesJogada++  
 if(vez){  
 button.*text* = "X"  
 vez = false  
 tabuleiro[j-1][i-1] = 1  
 }else{  
 button.*text* = "O"  
 vez = true  
 tabuleiro[j-1][i-1] = 2  
 }  
 button.*isEnabled* = false  
 analisarV(tabuleiro)  
 **}** linearLayout.addView(button)  
  
 }  
 layoutPrincipal.addView(linearLayout)  
 }  
 }  
  
 fun analisarV(ta: Array<IntArray>){  
 var textom: TextView = findViewById(R.id.*textov*)  
 //empate  
 if(vezesJogada == 9){  
 textom.*text* = "Empate!"  
 }  
 if(vezesJogada >= 5){  
 //diagonais  
 if(ta[0][0] == ta[1][1] && ta[1][1] == ta[2][2]){  
 if(ta[0][0] == 1)  
 textom.*text* = "d1 Vitória de X"  
 else  
 textom.*text* = "d1 Vitória de O"  
 }  
  
 if(ta[0][2] == ta[1][1] && ta[1][1] == ta[2][0]){  
 if(ta[0][2] == 1)  
 textom.*text* = "d2 Vitória de X"  
 else  
 textom.*text* = "d2 Vitória de O"  
 }  
  
 //horizontal  
 for(i in 0..2){  
 if(ta[i][0] == ta[i][1] && ta[i][1] == ta[i][2]){  
 if(ta[i][0] == 1)  
 textom.*text* = "h Vitória de X"  
 else  
 textom.*text* = "h Vitória de O"  
 }  
 }  
 //vertical  
 for(i in 0..2){  
 if(ta[0][i] == ta[1][i] && ta[1][i] == ta[2][i]){  
 if(ta[0][i] == 1)  
 textom.*text* = "v Vitória de X"  
 else  
 textom.*text* = "v Vitória de O"  
 }  
 }  
 }  
  
 }  
}

**Ex10:**

package com.example.lista1\_ex10  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.EditText  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var button: Button = findViewById(R.id.*button*)  
  
 button.setOnClickListener **{** var num: EditText = findViewById(R.id.*edittext1*)  
 var texto: TextView = findViewById(R.id.*text*)  
 var x = bin(num.*text*.toString())  
 texto.*text* = x.toString()  
 **}** }  
 fun bin(n: String): String{  
 var num = n.*toInt*()  
 var binario = ""  
 var binarioreverso = ""  
  
 while (num != 0){  
 binario += "${(num%2).toString()}"  
 num = num/2  
 }  
 for(i in binario.length - 1 *downTo* 0){  
 binarioreverso += binario[i]  
 }  
  
 return binarioreverso  
 }  
}

**Ex11:**

package com.example.lista1\_ex11  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.EditText  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var button: Button = findViewById(R.id.*button*)  
  
 button.setOnClickListener **{** var num: EditText = findViewById(R.id.*edittext1*)  
 var text: TextView = findViewById(R.id.*text*)  
  
 var numero = num.*text*.toString().*toInt*()  
 var hex = numero.*toString*(16)  
 text.*text* = hex.*uppercase*()  
 **}** }  
}

Ex12: