**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 androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.GridLayout  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
  
  
  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var btn1: Button = findViewById(R.id.*btn1*)  
 var btn2: Button = findViewById(R.id.*btn2*)  
 var btn3: Button = findViewById(R.id.*btn3*)  
 var btn4: Button = findViewById(R.id.*btn4*)  
 var btn5: Button = findViewById(R.id.*btn5*)  
 var btn6: Button = findViewById(R.id.*btn6*)  
 var btn7: Button = findViewById(R.id.*btn7*)  
 var btn8: Button = findViewById(R.id.*btn8*)  
 var btn9: Button = findViewById(R.id.*btn9*)  
 var btn10: Button = findViewById(R.id.*btn10*)  
 var btn11: Button = findViewById(R.id.*btn11*)  
 var btn12: Button = findViewById(R.id.*btn12*)  
 var btn13: Button = findViewById(R.id.*btn13*)  
 var btn14: Button = findViewById(R.id.*btn14*)  
 var btn15: Button = findViewById(R.id.*btn15*)  
 var btn16: Button = findViewById(R.id.*btn16*)  
 var btn17: Button = findViewById(R.id.*btn17*)  
 var btn18: Button = findViewById(R.id.*btn18*)  
 var btn19: Button = findViewById(R.id.*btn19*)  
 var btn20: Button = findViewById(R.id.*btn20*)  
  
 var gmor: TextView = findViewById(R.id.*gameover*)  
 var posicoes = IntArray(20)  
 while (true){  
 for(i in 0..19){  
 posicoes[i] = (0..5).*random*()  
 }  
 if(posicoes.*count***{it** == 1**}** == 7)  
 break  
 }  
  
  
 btn1.setOnClickListener **{** if(posicoes[0] == 1){  
 gmor.*text* = "perdeu no btn1"  
 btn1.setBackgroundColor(Color.*RED*)  
 }else{  
 btn1.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn2.setOnClickListener**{** if(posicoes[1] == 1){  
 gmor.*text* = "perdeu no btn2"  
 btn2.setBackgroundColor(Color.*RED*)  
 }else{  
 btn2.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn3.setOnClickListener**{** if(posicoes[2] == 1){  
 gmor.*text* = "perdeu no btn3"  
 btn3.setBackgroundColor(Color.*RED*)  
 }else{  
 btn3.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn4.setOnClickListener**{** if(posicoes[3] == 1){  
 gmor.*text* = "perdeu no btn4"  
 btn4.setBackgroundColor(Color.*RED*)  
 }else{  
 btn4.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn5.setOnClickListener**{** if(posicoes[4] == 1){  
 gmor.*text* = "perdeu no btn5"  
 btn5.setBackgroundColor(Color.*RED*)  
 }else{  
 btn5.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn6.setOnClickListener**{** if(posicoes[5] == 1){  
 gmor.*text* = "perdeu no btn6"  
 btn6.setBackgroundColor(Color.*RED*)  
 }else{  
 btn6.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn7.setOnClickListener**{** if(posicoes[6] == 1){  
 gmor.*text* = "perdeu no btn7"  
 btn7.setBackgroundColor(Color.*RED*)  
 }else{  
 btn7.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn8.setOnClickListener**{** if(posicoes[7] == 1){  
 gmor.*text* = "perdeu no btn8"  
 btn8.setBackgroundColor(Color.*RED*)  
 }else{  
 btn8.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn9.setOnClickListener**{** if(posicoes[8] == 1){  
 gmor.*text* = "perdeu no btn9"  
 btn9.setBackgroundColor(Color.*RED*)  
 }else{  
 btn9.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn10.setOnClickListener**{** if(posicoes[9] == 1){  
 gmor.*text* = "perdeu no btn10"  
 btn10.setBackgroundColor(Color.*RED*)  
 }else{  
 btn10.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn11.setOnClickListener**{** if(posicoes[10] == 1){  
 gmor.*text* = "perdeu no btn11"  
 btn11.setBackgroundColor(Color.*RED*)  
 }else{  
 btn11.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn12.setOnClickListener**{** if(posicoes[11] == 1){  
 gmor.*text* = "perdeu no btn12"  
 btn12.setBackgroundColor(Color.*RED*)  
 }else{  
 btn12.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn13.setOnClickListener**{** if(posicoes[12] == 1){  
 gmor.*text* = "perdeu no btn13"  
 btn13.setBackgroundColor(Color.*RED*)  
 }else{  
 btn13.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn14.setOnClickListener**{** if(posicoes[13] == 1){  
 gmor.*text* = "perdeu no btn14"  
 btn14.setBackgroundColor(Color.*RED*)  
 }else{  
 btn14.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn15.setOnClickListener**{** if(posicoes[14] == 1){  
 gmor.*text* = "perdeu no btn15"  
 btn15.setBackgroundColor(Color.*RED*)  
 }else{  
 btn15.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn16.setOnClickListener**{** if(posicoes[15] == 1){  
 gmor.*text* = "perdeu no btn16"  
 btn16.setBackgroundColor(Color.*RED*)  
 }else{  
 btn16.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn17.setOnClickListener**{** if(posicoes[16] == 1){  
 gmor.*text* = "perdeu no btn17"  
 btn17.setBackgroundColor(Color.*RED*)  
 }else{  
 btn17.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn18.setOnClickListener**{** if(posicoes[17] == 1){  
 gmor.*text* = "perdeu no btn18"  
 btn18.setBackgroundColor(Color.*RED*)  
 }else{  
 btn18.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn19.setOnClickListener**{** if(posicoes[18] == 1){  
 gmor.*text* = "perdeu no btn19"  
 btn19.setBackgroundColor(Color.*RED*)  
 }else{  
 btn19.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** btn20.setOnClickListener**{** if(posicoes[19] == 1){  
 gmor.*text* = "perdeu no btn20"  
 btn20.setBackgroundColor(Color.*RED*)  
 }else{  
 btn20.setBackgroundColor(Color.*GREEN*)  
 }  
 **}** }  
}

**Ex9:**

package com.example.lista1\_ex9  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button  
import android.widget.TextView  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 var texto: TextView = findViewById(R.id.*textview*)  
 var xvez = true  
  
 var btn1: Button = findViewById(R.id.*btn1*)  
 var btn2: Button = findViewById(R.id.*btn2*)  
 var btn3: Button = findViewById(R.id.*btn3*)  
 var btn4: Button = findViewById(R.id.*btn4*)  
 var btn5: Button = findViewById(R.id.*btn5*)  
 var btn6: Button = findViewById(R.id.*btn6*)  
 var btn7: Button = findViewById(R.id.*btn7*)  
 var btn8: Button = findViewById(R.id.*btn8*)  
 var btn9: Button = findViewById(R.id.*btn9*)  
  
 btn1.setOnClickListener **{** if(xvez){  
 btn1.*text* = "X"  
 xvez = false  
 }else{  
 btn1.*text* = "O"  
 xvez = true  
 }  
 **}** btn2.setOnClickListener **{** if(xvez){  
 btn2.*text* = "X"  
 xvez = false  
 }else{  
 btn2.*text* = "O"  
 xvez = true  
 }  
 **}** btn3.setOnClickListener **{** if(xvez){  
 btn3.*text* = "X"  
 xvez = false  
 }else{  
 btn3.*text* = "O"  
 xvez = true  
 }  
 **}** btn4.setOnClickListener **{** if(xvez){  
 btn4.*text* = "X"  
 xvez = false  
 }else{  
 btn4.*text* = "O"  
 xvez = true  
 }  
 **}** btn5.setOnClickListener **{** if(xvez){  
 btn5.*text* = "X"  
 xvez = false  
 }else{  
 btn5.*text* = "O"  
 xvez = true  
 }  
 **}** btn6.setOnClickListener **{** if(xvez){  
 btn6.*text* = "X"  
 xvez = false  
 }else{  
 btn6.*text* = "O"  
 xvez = true  
 }  
 **}** btn7.setOnClickListener **{** if(xvez){  
 btn7.*text* = "X"  
 xvez = false  
 }else{  
 btn7.*text* = "O"  
 xvez = true  
 }  
 **}** btn8.setOnClickListener **{** if(xvez){  
 btn8.*text* = "X"  
 xvez = false  
 }else{  
 btn8.*text* = "O"  
 xvez = true  
 }  
 **}** btn9.setOnClickListener **{** if(xvez){  
 btn9.*text* = "X"  
 xvez = false  
 }else{  
 btn9.*text* = "O"  
 xvez = true  
 }  
 **}** }  
}

**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: