

Informe sobre el CodeLab

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PRIMERA TANDA DE EJERCICIOS

Ejercicios 1.

1

2

3

Ejercicio 2.

```
fun main() {  
    println("I'm")  
    println("learning")  
    println("Kotlin!")  
}
```

I'm
learning
Kotlin!

Target platform: JVM Running on kotlin v. 1.9.10

Ejercicio 3

```
fun main() {  
    println("Monday")  
    println("Tuesday")  
    println("Wednesday")  
    println("Thursday")  
    println("Friday")  
}
```

Monday
Tuesday
Wednesday
Thursday
Friday

Ejercicio 4

```
fun main() {  
    println("Tomorrow is rainy")  
}
```

Tomorrow is rainy

Target platform: JVM Running on kotlin v. 1.9.10

Ejercicio 5

```
fun main() {  
    println("There is a chance of snow")  
}
```

There is a chance of snow

Target platform: JVM Running on kotlin v. 1.9.10

Ejercicio 6

```
fun main() {  
    println("Cloudy")  
    println("Partly Cloudy")  
    println("Windy")  
}
```

Cloudy
Partly Cloudy
Windy

Target platform: JVM Running on kotlin v. 1.9.10

Ejercicio 7

```
fun main() {  
    println("How's the weather today?")  
}
```

How's the weather today?

SEGUNDA TANDA DE EJERCICIOS

PROBLEMAS PRÁCTICOS CONCEPTOS BÁSICOS EJERCICIOS

Ejercicio 1.

```
fun main() {  
    println("Use the val keyword when the value doesn't change.")  
    println("Use the var keyword when the value can change.")  
    println("When you define a function, you define the parameters")  
    println("When you call a function, you pass arguments for the parameters.")  
}
```

Use the val keyword when the value doesn't change.
Use the var keyword when the value can change.
When you define a function, you define the parameters that can be used.
When you call a function, you pass arguments for the parameters.

Ejercicio 2.

El println que se nos ofrece a corregir presenta una apertura con (, pero sin embargo, su cierre es con }. Además el tipo de comilla de apertura y cierre son distintas.

```
fun main() {  
    println("New chat message from a friend")  
}
```

New chat message from a friend

Ejercicio 3.

Lo que ocurre es que para atribuirle valor a las variables está implementando `val` cuando esta se emplea cuando esperamos que nuestra variable no cambie, por ello deberíamos de implementar `var`.

```
fun main() {  
    var discountPercentage: Int = 0  
    var offer: String = ""  
    val item = "Google Chromecast"  
    discountPercentage = 20  
    offer = "Sale - Up to $discountPercentage% discount on $item"  
  
    println(offer)  
}
```

Sale - Up to 20% discount on Google Chromecast! Hurry up!

Ejercicio 4

No se realiza la suma inicial debido a que nuestras variables están en formato `String` en vez de en formato `int` para que puedan ser operables, no obstante se hace una concatenación de las cadenas.

```
fun main() {  
    val numberOfAdults = "20"  
    val numberOfKids = "30"  
    val total = numberOfAdults + numberOfKids  
    println("The total party size is: $total")  
}
```

The total party size is: 2030

Para que realice la suma debe de atribuirle valores numéricos en vez de valores textuales.

```
fun main() {  
    val numberOfAdults = 20  
    val numberOfKids = 30  
    val total = numberOfAdults + numberOfKids  
    println("The total party size is: $total")  
}
```

The total party size is: 50

Ejercicio 5

El código proporcionado nos indicará la suma a realizar, pero sin operar dicha suma debido a que totalSalary está sumando en formato cadena de texto.

```
fun main() {  
    val baseSalary = 5000  
    val bonusAmount = 1000  
    val totalSalary = "$baseSalary + $bonusAmount"  
    println("Congratulations for your bonus! You will receive a  
}
```

ulations for your bonus! You will receive a total of 5000 + 1000 (

Target platform: JVM Running on Kotlin v. 1.9.10

Para realizar ahora la operación debemos eliminar la cadena de caracteres de totalSalary, consiguiendo de esta forma que nos haga la suma de 5000 + 1000, es decir, devolviéndonos 6000.

```
fun main() {  
    val baseSalary = 5000  
    val bonusAmount = 1000  
    val totalSalary = baseSalary + bonusAmount  
    println("Congratulations for your bonus! You will receive a  
}
```

or your bonus! You will receive a total of 6000 (additional bonus)

Ejercicio 6

Para arregla el código del primer paso creamos una nueva variable result.

```
fun main() {  
    val firstNumber = 10  
    val secondNumber = 5  
    val result = firstNumber + secondNumber  
    println("$firstNumber + $secondNumber = $result")  
}
```

10 + 5 = 15

Paso 2: Implementamos la función add con sus parámetros.

```
fun main() {  
    val firstNumber = 10  
    val secondNumber = 5  
    val thirdNumber = 8  
  
    val result = add(firstNumber, secondNumber)  
    val anotherResult = add(firstNumber, thirdNumber)  
  
    println("$firstNumber + $secondNumber = $result")  
    println("$firstNumber + $thirdNumber = $anotherResult")  
}  
fun add(n1 : Int, n2 : Int): Int {  
    return n1 + n2  
}  
// Define add() function below this line
```

10 + 5 = 15

10 + 8 = 18

Paso 3: Mi función subtract realiza una multiplicación de los números de entrada.

```
fun main() {
    val firstNumber = 10
    val secondNumber = 5
    val thirdNumber = 8

    val result = add(firstNumber, secondNumber)
    val anotherResult = add(firstNumber, thirdNumber)
    val result2 = subtract(firstNumber, secondNumber)
    val anotherResult2 = subtract(firstNumber, thirdNumber)

    println("$firstNumber + $secondNumber = $result")
    println("$firstNumber + $thirdNumber = $anotherResult")
    println("$firstNumber + $secondNumber = $result2")
    println("$firstNumber + $thirdNumber = $anotherResult2")
}

fun add (n1 : Int, n2: Int) : Int{
    return n1+n2
}

fun subtract (n1 : Int, n2: Int) : Int{
    return n1*n2
}

// Define add() function below this line
```

```
10 + 5 = 15
10 + 8 = 18
10 + 5 = 50
10 + 8 = 80
```

Target platform: JVM Ri

Ejercicio 7

Paso 1: Crear la función displayAlertmessage() para que muestre el mensaje que nos indican.

```
fun main() {
    val operatingSystem = "Chrome OS"
    val emailId = "sample@gmail.com"

    println(displayAlertMessage(operatingSystem, emailId))
}

fun displayAlertMessage(n1 : String, n2 : String) : String {
    return "There's a new sign-in request on $n1 for your Google Account $n2"
}

// Define your displayAlertMessage() below this line.
```

There's a new sign-in request on Chrome OS for your Google Account sample@gmail

Paso 2:

Hacemos una modificación del código introduciendo en la función `displayAlertmessage()` un String inicial de `displayAlertMessage(operatingSystem: String, emailId: String)`

```
fun main() {  
    val firstUserEmailId = "user_one@gmail.com"  
  
    // The following line of code assumes that you named your parameter as emailId  
    // If you named it differently, feel free to update the name.  
    println(displayAlertMessage(emailId = firstUserEmailId))  
    println()  
  
    val secondUserOperatingSystem = "Windows"  
    val secondUserEmailId = "user_two@gmail.com"  
  
    println(displayAlertMessage(secondUserOperatingSystem, secondUserEmailId))  
    println()  
  
    val thirdUserOperatingSystem = "Mac OS"  
    val thirdUserEmailId = "user_three@gmail.com"  
  
    println(displayAlertMessage(thirdUserOperatingSystem, thirdUserEmailId))  
    println()  
}  
fun displayAlertMessage(operatingSystem : String = "Unknow OS", emailId : String) : String {  
    return "There's a new sign-in request on $operatingSystem for your Google Account $emailId"  
}  
  
// Define your displayAlertMessage() below this line.
```

There's a new sign-in request on Unknow OS for your Google Account user_one@gmail.com

There's a new sign-in request on Windows for your Google Account user_two@gmail.com

There's a new sign-in request on Mac OS for your Google Account user_three@gmail.com

Ejercicio 8

He modificado las nomenclaturas, sustituyendo las mayúsculas y minúsculas en función a lo aprendido en el codelab.

```
fun main() {  
    val steps = 4000  
    val caloriesBurned = pedometerStepsToCalories(steps)  
    println("Walking $steps steps burns $caloriesBurned calories")  
}  
  
fun pedometerStepsToCalories(numberOfSteps: Int): Double {  
    val caloriesBurnedForEachStep = 0.04  
    val totalCaloriesBurned = numberOfSteps * caloriesBurnedForEachStep  
    return totalCaloriesBurned  
}
```

Ejercicio 9

```
fun main() {  
    println(comparador(300, 250))  
}  
  
fun comparador(timeSpentToday : Int, timeSpentYesterday: Int) : Boolean {  
    return timeSpentToday > timeSpentYesterday  
}
```

true

EJERCICIO DISEÑO APP TARJETA DE CUMPLEAÑOS

```

package com.example.happybirthday

import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.layout.Column
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.foundation.layout.padding
import androidx.compose.material3.MaterialTheme
import androidx.compose.material3.Surface
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.sp
import com.example.happybirthday.ui.theme.HappyBirthdayTheme

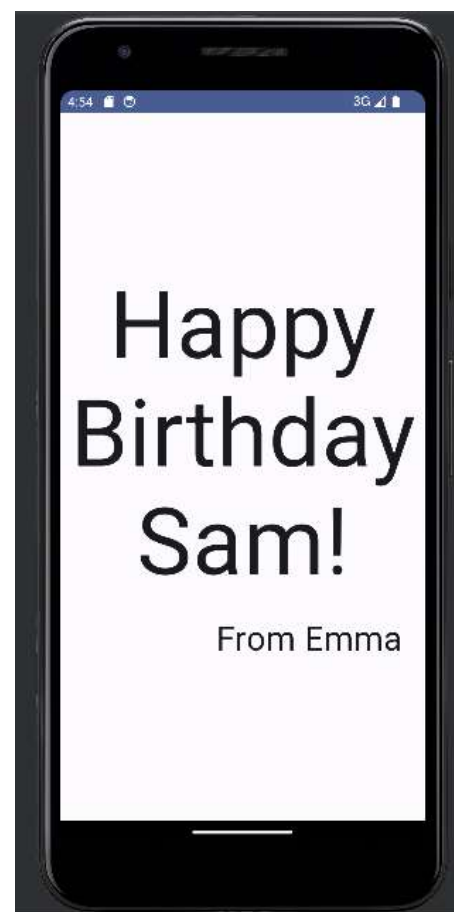
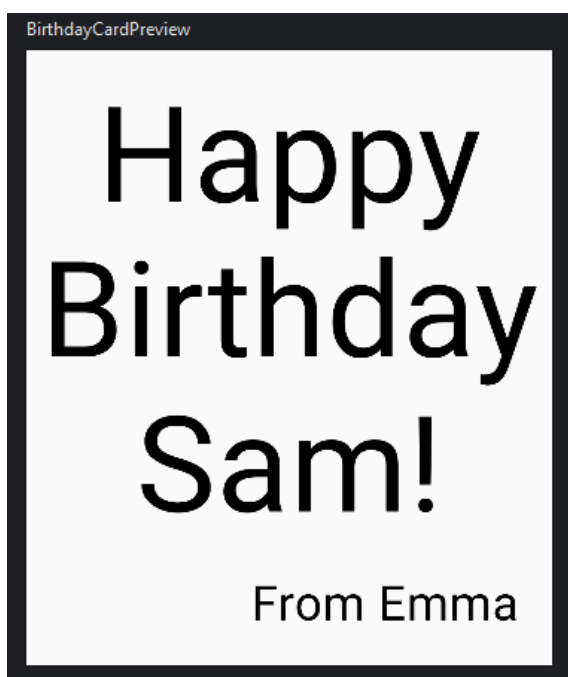
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            HappyBirthdayTheme {
                GreetingText(message = "Happy Birthday Sam", from = "Emma")
            }
        }
    }
}

@Composable
fun GreetingText(message: String, from: String, modifier: Modifier = Modifier) {
    Column(verticalArrangement = Arrangement.Center, modifier = modifier.padding(16.dp)) {
        Text(
            text = message,
            fontSize = 18.sp,
            lineHeight = 1.2,
            align = TextAlign.Center
        )
        Text(
            text = from,
            fontSize = 14.sp,
            modifier = modifier.padding(0.dp).align(Alignment.End)
        )
    }
}

@Preview(showBackground = true)
@Composable
fun BirthdayCardPreview() {
    GreetingText(message = "Happy Birthday Sam", from = "Emma")
}

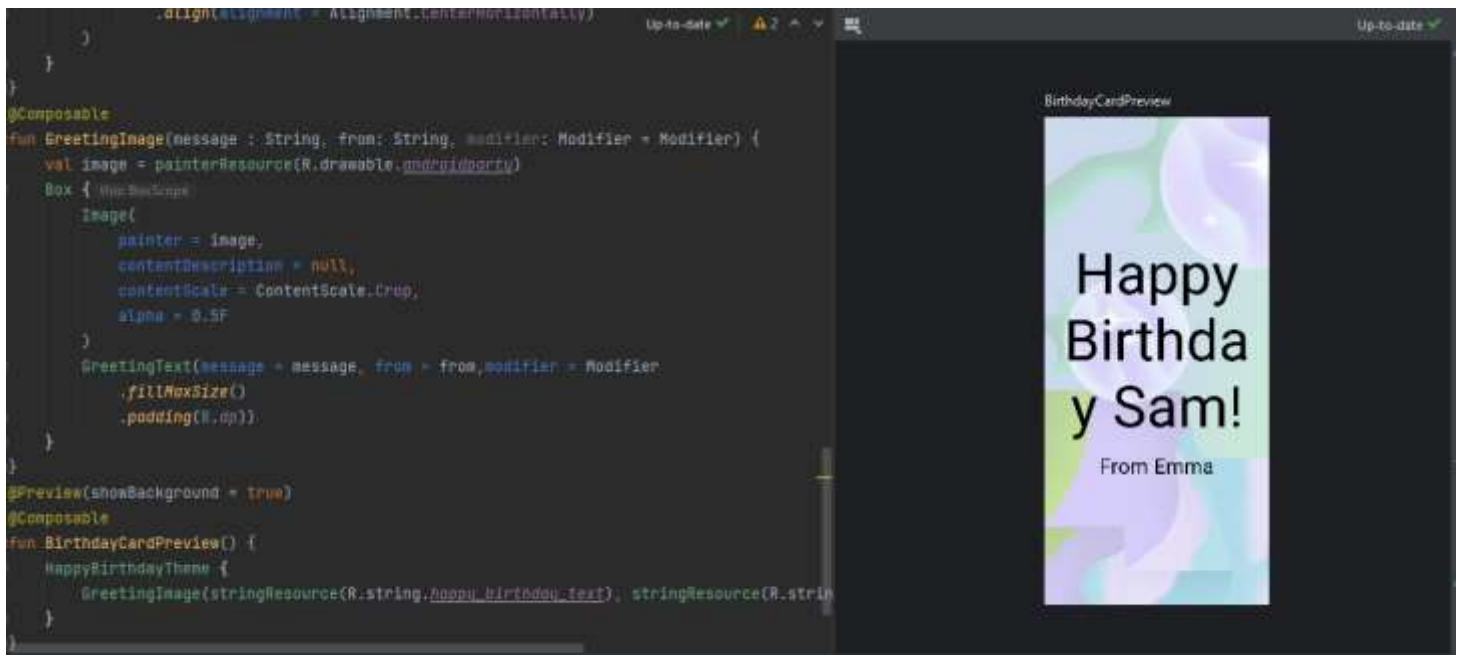
```

DESIGN



EJERCICIO DISEÑO APP TARJETA DE CUMPLEAÑOS CON IMAGEN

Funcion GreetingImage



Función Main implementando GreetingImage

