

# M04 Midterm Exam Practice

**Due** No due date      **Points** 0      **Questions** 50      **Time Limit** None  
**Allowed Attempts** Unlimited

## Instructions

This is a practice exam for the midterm. It will present you with 50 questions each time you take it. All questions are taken from modules 1 - 4. You can take this exam as many times as you want to prepare you for the midterm exam.

Take the Quiz Again

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	45 minutes	0 out of 0

Submitted Sep 18 at 1:22pm

### Question 1

0 / 0 pts

The When statement is similar in concept to the java switch statement. It can have a number of execution paths.

Correct!

☒ True

☐ False

### Question 2

0 / 0 pts

In Kotlin, a function requires a return statement

**Correct!**☐ True☒ False**Question 3****0 / 0 pts**

The package name:

**Correct!**☒ uniquely identifies the app on the device**Correct!**☒ should be unique on the Google Play store**Correct!**☒

Once you publish the app with this package name that name should never be changed.

**Correct!**☒

If you were to change the package name, existing users of your application will not see the app as an update

**Question 4****0 / 0 pts**

Kotlin code depends on what you write in the \_\_\_\_\_. This is the "starting point" of the application. It calls out to other functions / classes / libraries.

**Correct!**☒ main function☐ start function☐ begin function

☐ main class

### Question 5

0 / 0 pts

The operating system for iOS development is

☐ Windows

☐ Java

☒ MacOS

☐ iOS

Correct!

### Question 6

0 / 0 pts

Android Studio is built for Kotlin development; therefore, you can create a "New Kotlin Project"

☐ True

☒ False

Correct!

### Question 7

0 / 0 pts

Includes everything required to build an Android application. Includes the class android.widget

**Correct!**

- ☐ Hardware Abstraction Layer (HAL)
- ☐ Android Runtime (ART)
- ☐ Native C/C++ Libraries
- ☐ Java API Framework
- ☐ System apps
- ☒ Android Libraries

**Question 8****0 / 0 pts**

in Kotlin "Int" value range is:

- ☐ 0 - 255
- ☐ -32768 to 32767
- ☒ -2,147,483,648 to 2,147,483,647
- ☐ 64 bit signed
- ☐ single-precision 32 bit floating point
- ☐ double-precision 64 bit floating point

**Correct!****Question 9****0 / 0 pts**

The \_\_\_\_\_ exposes hardware capabilities of devices to the high level Kotlin API framework.

**Correct!**

- ☒ Hardware Abstraction Layer (HAL)
- ☐ Android Runtime (ART)
- ☐ Native C/C++ Libraries
- ☐ Java API Framework
- ☐ System apps
- ☐ Android Libraries

**Question 10****0 / 0 pts**

In Kotlin, Double value range is:

- ☐ 0 - 255
- ☐ -32768 to 32767
- ☐ -2,147,483,648 to 2,147,483,647
- ☐ 64 bit signed
- ☐ single-precision 32 bit floating point
- ☒ double-precision 64 bit floating point

**Correct!****Question 11****0 / 0 pts**

What is the output of the following code?

```
var x:Byte =10
```

```
var y:Byte=15

fun main(args: Array<String>){

    var z=x+y

    println("z = $z")

}
```

Correct Answer

☐ z = 25

You Answered

☒ Nothing... it will not compile☐ z = \$z☐ z = 10011**Question 12****0 / 0 pts**

Study the following code:

```
fun main(args: Array<String>){
    var myList = listOf(1, "This is a test")
    myList[0] =1000

    println(myList[0])
}
```

What is the out of this code?

☐ 1

You Answered

☒ 1000☐ This is a test

Correct Answer

☐ Unresolved reference error message

**Question 13****0 / 0 pts**

The \_\_\_\_\_ significantly reduces the time it takes to update your application with changes. It was added with API Level \_\_\_\_\_

☐ Java Run☐ 10☒ Instant Run☒ 21**Correct!****Correct!****Question 14****0 / 0 pts**

Study the following code:

```
class Animal{
    var Name: String? = null
    var Breed: String? = null
    var Age: Int? = null

    constructor(Name: String, Breed: String, Age: Int):this
    (){
        this.Name=Name
        this.Breed=Breed
        this.Age=Age
    }
}
class Cat():Animal()
fun main(args: <String>){
    var c1=Cat("Emily","American Shorthair",10)
    println(c1.Breed)
}
```

What is the output of the above code?

You Answered

☐ Emily☒ American Shorthair☐ 10

Correct Answer

☐ Syntax error message**Question 15****0 / 0 pts**

The language for iOS development is called:

☐ Java☒ Swift☐ Kotlin☐ XCode**Correct!****Question 16****0 / 0 pts**

In Kotlin, the return type Unit in a function corresponds to the return type of void in java.

☒ True☐ False**Correct!**



**Question 17****0 / 0 pts**

When the \_\_\_\_\_ statement is encountered inside a loop, the loop is immediately terminated and will then resume its work starting with the statement after the loop

**Correct!**

- ☒ Break
- ☐ Continue
- ☐ Return
- ☐ For loop

**Question 18****0 / 0 pts**

In Kotlin, which of the following are true about characters:

**Correct!**☒ Data type is Char**Correct!**☒ Always enclosed in single quotes☐ Always enclosed in double quotes☐ Can hold multiple characters (ex. '12') would be correct**Question 19****0 / 0 pts**

Which of the following will correctly create an application that will display "Hello World"?

**Correct!**

☐ `fun main(args: Array<String>){  
 println("Hello")  
}`

☐ `fun main(args: Array<String>){  
 println(Hello World")  
}`

☒ `fun main(args: Array<String>){  
 println("Hello World")  
}`

☐ `fun main{  
 println("Hello World")  
}`

**Question 20****0 / 0 pts**

What is the output of the following code:

```
fun main(args: Array<String>) {  
    var temp: Int = 70  
    var message: String?=null  
  
    if (temp >= 90) message="It is really hot!"  
    else if (temp>=80) message="It is warm outside."  
    else if (temp>=70) message="It is just right."  
    else if (temp>=60) message="It is cool outside."  
    else message="It is cold outside!"  
    println(message)  
}
```

☐ It is really hot!

☐ It is warm outside.

**Correct!**

☒ It is just right.

- ☐ It is cool outside.
- ☐ It is cold outside!
- ☐ Error message as this code contains a syntax error.

**Question 21****0 / 0 pts**

Study the following code:

```
class Animal{
    var Name: String? = null
    var Breed: String? = null
    var Age: Int? = null

    constructor(Name: String, Breed: String, Age: Int):this
    (){
        this.Name=Name
        this.Breed=Breed
        this.Age=Age
    }
    constructor(Name: String):this(){
        this.Name=Name
    }
}
class Dog():Animal()
fun main(args: <String>){
    var d1=Dog("Ruffy","Cocker Spaniel",10)
    println(d1.Breed)
}
```

What is the output of the above code?

- ☐ Nothing is wrong. It will compile fine and produce the expected results

**Correct!**

It will err off since the parent class does not allow for inheritance by default. The parent class must be open. For example:

```
open class Animal{
}
```

☐

It will err off since the child class does not allow for inheritance by default.  
The child class must be open. For example:

```
open class Dog{  
  
}
```

☐

The defined class is about dogs not cats

☐

It will err off since you can't have multiple constructors

## Question 22

0 / 0 pts

The \_\_\_\_\_ statement lets control go directly to the test condition and after that, continues the looping process

☐

Break

☒

Continue

☐

Return

☐

For loop

Correct!

## Question 23

0 / 0 pts

Eclipse is the official IDE for Android application development

☐

True

☒

False

Correct!

**Question 24****0 / 0 pts**

The callbacks executed when the application is "visible" is / are:

☐ onCreate☒ onStart☒ onResume☒ onPause☒ onStop☐ onDestroy**Correct!****Correct!****Correct!****Correct!****Question 25****0 / 0 pts**

Study the following code:

```
class Cats{  
    companion object {  
        val numberOfCats = 0  
    }  
}
```

The catsNo is a static variable which can be used by access it directly from the name of the object(ex. Cats.numberOfCats).

☒ True☐ False**Correct!**

**Question 26****0 / 0 pts**

What is the output of the following code:

```
fun main(args: Array<String>){  
    var totSales = 5000  
    var yearsEmployed = 5  
  
    if (totSales >= 6000 || yearsEmployed >= 5) println("Re  
ceives bonus.")  
    else println("Does not receive bonus.")  
}
```

**Correct!**

- ☒ Receives bonus.
- ☐ Does not receive bonus.
- ☐ Syntax error message

**Question 27****0 / 0 pts**

The callbacks executed when the app is "active" are:

☐ onCreate

☐ onStart

☒ onResume

☒ onPause

☐ onStop

☐ onDestroy

**Correct!****Correct!**

**Question 28****0 / 0 pts**

The Android SDK platform is a set of libraries and APIs that are necessary in order to develop Android applications.

**Correct!**☒ True☐ False**Question 29****0 / 0 pts**

The IDE for iOS Development is called

**Correct!**☒ XCode☐ Android Studio☐ Kotlin☐ Java**Question 30****0 / 0 pts**

If I wanted to create a new class called **Cat** that will contain all properties and methods of the **Animal** class which was previously defined, I could write the following code:

**Correct!**☒ `class Cat():Animal()`☐ Nothing. There is no way to inherit from the animal class

- ☐ class Cat() extends Animal()
- ☐ class Cat() implements Animal()

**Question 31****0 / 0 pts**

Consider the following code:

```
fun main(args: Array<String>){  
    var count=1  
    while (count<5)  
    {  
        println("count= $count")  
        count++  
    }  
}
```

What is the output of the above code?

☐ `count= 1  
count= 2  
count= 3  
count= 4  
count= 5`

**Correct!**

☒ `count= 1  
count= 2  
count= 3  
count= 4`

☐ `count= 1 2 3 4`

☐ Syntax error



**Question 32****0 / 0 pts**

Which of the following statements will correctly allow the user to enter an integer

**Correct!**☒ `var z = Integer.valueOf(readLine())`**Correct Answer**☐ `var z=readLine()!!.toInt()`☐ `var z=integer.valueOf(readline())`☐ `var z=readLine()`**Question 33****0 / 0 pts**

The Kotlin plugin is bundled with Android Studio version \_\_\_\_ and later.

**Correct!**☒ 3.0☐ 2.5☐ 2.0☐ 1.0**Question 34****0 / 0 pts**

Each application runs in its own process and contains a unique instance of the Android Runtime on Android devices starting with Android version \_\_\_\_\_ .

☐ 2.0☐ 4.0☐ 6.0**Correct!**☒ 8.0**Question 35****0 / 0 pts**

Study the following code:

```
fun main(args: Array<String>){
    println("What size shoes do you want?")
    println("Enter 1 for small, 2 for medium or 3 for large shoes.")
    var shoeSize=readline()!!.toInt()
    var sizeToOrder:String?=null

    when(shoeSize){
        1-> sizeToOrder="small"
        2-> sizeToOrder="medium"
        3-> sizeToOrder="large"
        else->println("You did not enter a correct shoe size.")
    }
    println("Shoe size requested is $sizeToOrder")
}
```

If the user enters 4 at the user prompt, what will the output be for shoe size?

☐ Shoe size requested is small☐ Shoe size requested is medium☐ Shoe size requested is large**Correct!**☒ You did not enter a correct shoe size.

**Question 36****0 / 0 pts**

Any method / function / block of code written outside the main function will be considered a definition and will be called from the main function to do its work.

**Correct!**☒ True☐ False**Question 37****0 / 0 pts**

The Android Studio IDE includes both the Android SDK tools and the Android build tools

**Correct!**☒ True☐ False**Question 38****0 / 0 pts**

Which of the following is the correct output for this code:

```
var x= arrayOf(10, 20, 30)
```

```
println(x[1])
```

**Correct!**☒ 20

- ☐ 10
- ☐ 30
- ☐ This code will not compile. It will display a compile error

**Question 39****0 / 0 pts**

What is the output of the following code?

```
fun main(args: Array<String>){  
    var item = 50  
    if (item > 40)  
        println("This statement is executed")  
    println("This is the next statement")  
}
```

- ☐ This statement is executed
- ☒ This statement is executed  
This is the next statement
- ☐ This is the next statement
- ☐ This code will output a syntax error.

**Correct!****Question 40****0 / 0 pts**

In an if statement, which of the following tests to see if the item on the left is equal to the item on the right?

Correct!

☒ ==

☐ =

☐ !=

☐ <>

### Question 41

0 / 0 pts

The Android Platform Architecture is based on Microsoft Windows.

☐ True

Correct!

☒ False

### Question 42

0 / 0 pts

Match the processes with their importance as far as the Android OS is concerned in descending order (1 = most important)

Correct!

Foreground process

1



Correct!

Background Process

4



Correct!

Visible Process

2

**Correct!****Empty Process**

5

**Correct!****Services Process**

3

**Question 43****0 / 0 pts**

Which of the following are implicitly defined integer variables?

**Correct!**☒ var x=9**Correct!**☒ var y=9☐ var x:Int=9☐ var y:Int=9**Question 44****0 / 0 pts**

Consider the following code:

```
fun main(args: Array<String>){  
    var count=7  
    do{  
        println(count)  
    } while (count>=6)  
}
```

What would the output be?

**Correct!**☐

1  
2  
3  
4  
5  
6

☒ There would be no output☐

7

☐

1  
2  
3  
4  
5  
6  
7

**Question 45****0 / 0 pts**

In Kotlin "Float" value range is:

☐ 0 - 255☐ -32768 to 32767☐ -2,147,483,648 to 2,147,483,647☐ 64 bit signed**Correct!**☒ single-precision 32 bit floating point☐ double-precision 64 bit floating point

**Question 46****0 / 0 pts**

The Android App package name should include:

**Correct!**

- ☒ Two to three words separated by dots.
- ☐ One word
- ☐ Two to six words separated by dots
- ☐ One sentence
- ☐ Three to six words separated by dots.

**Question 47****0 / 0 pts**

The programming language we will be using for Android app development is called

**Correct!**

- ☐ Java
- ☒ Kotlin
- ☐ Swift
- ☐ Windows

**Question 48****0 / 0 pts**

Study the following code:



```
open class Animal{
    var Name: String? = null
    var Breed: String? = null
    open var Age: Int? = null

    constructor(Name: String, Breed: String, Age: Int):this()
    {
        this.Name=Name
        this.Breed=Breed
        this.Age=Age
    }
    constructor(Name: String):this(){
        this.Name=Name
    }
}
class Dog():Animal(){
    override var Age: Int? = null
}
fun main(args: <String>){
    var d1=Dog("Ruffy","Cocker Spaniel",10)
    println(d1.Breed)
}
```

Due to inheritance, Age in Dog is the same Age in Animal

☐ True

☒ False

Correct!

## Question 49

0 / 0 pts

Study the following code:

```
fun main(args: Array<String>){
    var result=sum(2,40)
    println("Result = $result")
}

fun sum(num1:Int, num2:Int) :Int
{
    var total=num1+num2
    return total
}
```

What is the output of the above code?

Correct!

- ☐ Result = \$result
- ☐ Result = \$42
- ☒ Result = 42
- ☐ Syntax error message

### Question 50

0 / 0 pts

What is the output of the following code:

```
fun main(args: Array<String>) {  
    var temp: Int = 70  
    var message: String?=null  
  
    if (temp >= 90) message="It is really hot!"  
    else if (temp>=80) message="It is warm outside."  
    else if (temp>=70) message="It is just right."  
    else if (temp>=60) message="It is cool outside."  
    else message="It is cold outside!"  
    println(message)  
}
```

You Answered

- ☐ It is really hot!
- ☐ It is warm outside.
- ☒ It is just right.
- ☐ It is cool outside.
- ☐ It is cold outside!

**Correct Answer**

- ☐ Error message as this code contains a syntax error.