

What is the difference between statically typed and dynamically typed languages?

Is Kotlin statically typed or dynamically typed?

What kind of kernel does Android have?

What is a singleton pattern?

What are advantages of Kotlin over Java?

What is object oriented programming?

Is Kotlin object oriented or functional?

What is the difference between “val” and “var” in Kotlin

What are Kotlin access modifier? If no access modifier is provided, what is Kotlin default?

How is this default access modifier in Kotlin different from Java? (related to above question on access modifier)

Can you name some Kotlin data structures?

What is “varargs” keyword in Kotlin?

What is “extension function” in Kotlin. What are its advantages.

How is null-safety enforced in Kotlin? (Ans-types are default to non-null, need to use ? to show null)

Have you used Elvis operators?

What are lambda functions?

Where is “it” keyword used in lambda functions?

What is an “interface”

What is inheritance in object oriented programming?

What does a call to “super()” do when you are defining a class that extends something else?

What are abstract classes?

Does Kotlin support multiple inheritance?

Since Kotlin does not support multiple inheritance, what are the strategies around it?

What are open classes in Kotlin?

What is “object” keyword in Kotlin?

Can you create multiple instances of classes you created using the “object” keyword?

What is “dp” or “dips” as related to display in Android?

Why do we denote items with size “dp”

What is an Intent in Android?

What are “listeners” in Android, how do you register them?

What is SAM in Kotlin (Single Abstract Method)

Can you name some app components in Android? (Ans- Activities, Services, Broadcast Receivers, Content providers etc)

What is the activity lifecycle in Android?

Can you name some important events in the activity lifecycle? (Ans- onCreate, onStart, onPause, onResume, onDestroy etc)

What are Fragments in Android?

What are the uses of fragments?

Where can you store a color for a UI element in a text based way ? (Ans- in colors.xml)

What are “callbacks”

Are callbacks synchronous or asynchronous? (Ans- either)

What are SDK/API levels in Android release?

What is the build automation tool you have used in Android?

What is “view binding” ?

What is Kotlin Synthetics library and why did Google move away from it?

What is the default sql database provided in Android?

What is a viewmodel in Android? Why use it?

What is LiveData in Android?

What are “Observables”

Describe the observer-observable pattern.

What is Data Binding in Android?

What changes do you have to make to the layout file if you want to use Data Binding?

What is “Room”

What are DAO (Data Access Objects)

Describe the MVVM architecture

What is a RecyclerView

What is the advantage of using a RecyclerView

What is a REST API?

Can you give an example of a Rest client for network requests (Ans- Retrofit, many others)

What is JSON format.

Why is JSON preferred over xml?

Have you used any JSON conversion libraries? (Yes- GSON)

Can you execute network calls on the main Android thread? (Ans-no)

How do you get around this restriction of not being able to execute network calls on main Android thread?

What is MVI architecture?

What are coroutines in Kotlin?

What is an example of a “suspending” function in coroutines?

Can coroutines be launched anywhere? Ans- No, they can be launched only inside the coroutine scope

What is runBlocking in coroutines (Ans- a scope builder)

Is runBlocking a regular function or a suspending function?

What is a “Job” in coroutines? Ans- A job is a job object which is a handle to the coroutine. Can be used to wait for the coroutine to complete.

What is “join” for coroutines?

Name some sensors on Android devices. Have you used any sensor?

Why do you serialize objects?

What is a Timeout Cancellation in coroutines?

What is the difference between “async” and “launch” as related to coroutines (Ans- launch returns a CoroutineScope, async returns a Deferred which is a non-blocking future)

How do you initialize threads?

Why do we use threads in Android?

Can you manipulate a UI element with a worker thread in Android? Ans- No

What are background services in Android?

What are bound services in Android?