Questionaire:

What is the difference between var and let?

var is used to create mutable variables and let is used for constants (immutable).

What is an optional?

an optional is a variable or constant that can hold a value or no value(nil)

What is optional chaining vs optional binding?

optional binding is used to retreive the value from an optional variable which could or could not actually have a value stored. if let or if var is used to retreive the value from the optional variable and store it into a temporary variable/constant.

optional chaining is used to querying and calling properties or methods from an optional variable. If the optional variable contains a value, then the method/subscript call will succeed, else, it will return a nil.

What are the different ways to unwrap an optional? How do they work? Are they safe? forced unwrapping - unsafe -> let a = b!

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optional binding - safe ->
if let a = b {
}

optional chaining - safe -> let a = b?.count

Nil coalescing operator - safe -> let a = b?? ""
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Guard statement - safe -> quard let a = b else { return }

What is a closure?

Closures are self-contained blocks of functionality that can be passed around and used in your code.

What is the difference between a class and a struct? classes are reference type and structs are value type

What is the syntax '??' do?

the coalescing operator is used similarly to an if-else statement for optionals. If the optional variable is not nil, it will return its value, else, it will return the value specified on the right of the operator

What is a tuple?

a tuple type is a comma-separated list of zero or more types, enclosed in parentheses

What is Any vs AnyObject?

Any can be used to represent an instance of any type and anyobject is used to represent only an instance of a class

What is a protocol?

A protocol defines a blueprint of methods, properties, and other requirements that suit a particular task or piece of functionality.

What is Delegation

Delegation is a design pattern that enables a class to hand off (or "delegate") some of its responsibilities to an instance of another class.