Getting Started with iOS, Swift and Coding guidelines

1. Explain what is Xcode?

   Xcode is a development software used for developing applications and softwares for macOS, iOS, iPadOS, watchOS, and tvOS.

2. Explain how you can add frameworks in Xcode projects?

   Step 1 - Select the project file from the project navigator on the left side of the project window.
   Step 2 - Select the target for where you want to add frameworks in the project settings editor.
   Step 3 - Select the “Build Phases” tab, and click on “Link Binary With Libraries” to view all of the frameworks in your application.
   Step 4 - To Add frameworks, click the “+” below the list of frameworks.

3. Explain what is the difference between Xcode, Cocoa and Objective C?

   Xcode is a developer environment that allows us to code, debug and test our applications for Mac, iOS, tvOS, watchOS. Basically Xcode is our workshop.
   Objective C is a programming language which earlier we used to develop these applications in Xcode.
   Cocoa is a framework that provides you prebuilt data structures and classes to build all Mac applications so that we do not have to write everything ourselves.

4. What is the shortcut to open the “Code Snippet Library” in Xcode?

   Shift + command + L

5. Mention what are the build phases available in Xcode?
   a. Target dependencies
   b. Compile sources
   c. Link binary with libraries
   d. Copy bundle resources

6. Explain how app delegate is declared by Xcode project templates?

   App delegate is declared as a subclass of UIResponder by Xcode project templates. If the UIApplication object does not handle an event, it dispatches the event to your app delegate for processing.

7. Explain how you define variables in Swift language?

   Variables are the identifiers declared by the users with some value of a particular type and this value can be changed further as per the requirement.

8. What is interface builder?

   NO CODING! The Interface Builder editor within Xcode makes it simple to design a full user interface without writing any code. Simply drag and drop windows, buttons, text fields, and other objects onto the design canvas to create a functioning user interface.

9. What is the difference between AppDelegate and SceneDelegate?

AppDelegate	SceneDelegate
A set of methods to manage shared behaviors for your app.	The core methods you use to respond to life-cycle events occurring within a scene.
AppDelegate is responsible for handling application-level events, like app launch.	SceneDelegate is responsible for scene lifecycle events like scene creation, destruction and state restoration of a UISceneSession.
@MainActor protocol UIApplicationDelegate	@MainActor protocol UISceneDelegate

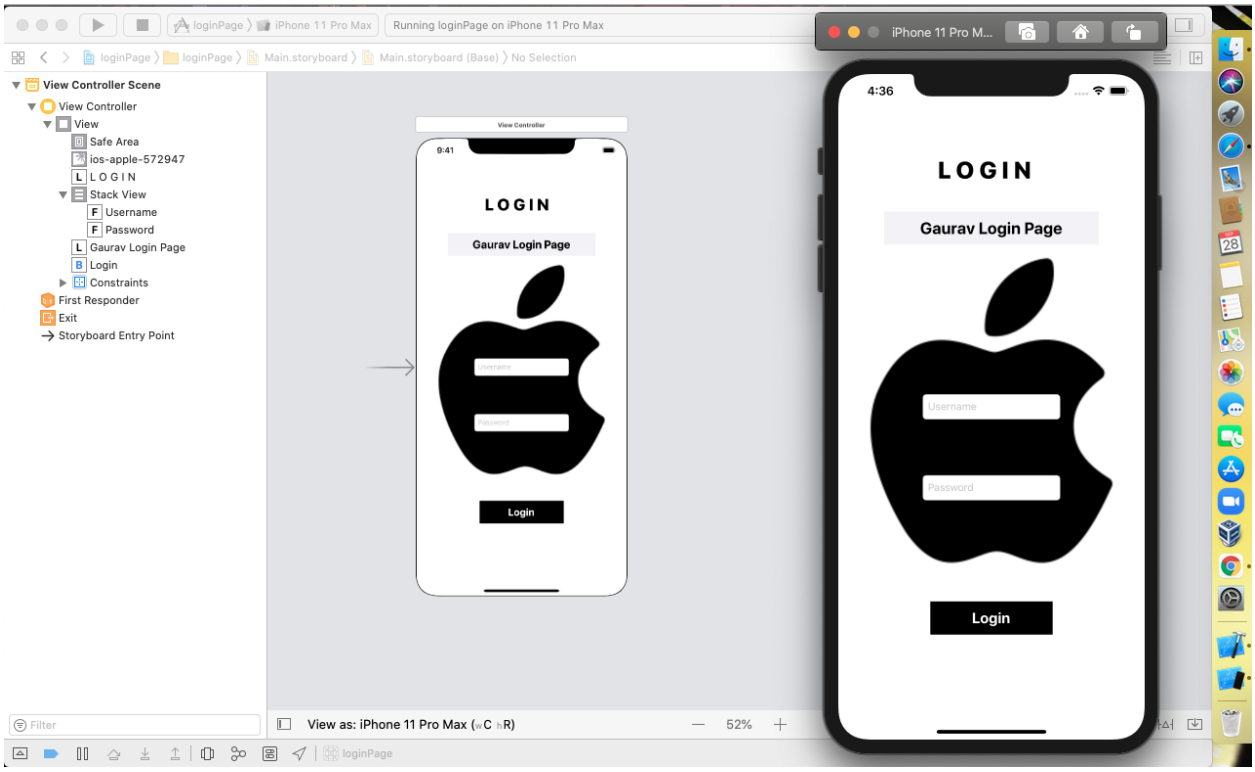
10. Which function is called when the app launches from a suspended state?

    applicationWillEnterForeground and applicationWillResignActive

11. Which framework is needed to render UI elements in Playground?

    UIKit framework

12. Create an app with a login interface which should have two text fields for email, password where the password is a secure field and a button.



13. List devices and their resolutions, screen size has iOS as their OS.

12.9" iPad Pro	1024x1366 pt (2048x2732 px @2x)
11" iPad Pro	834x1194 pt (1668x2388 px @2x)
10.5" iPad Pro	834x1194 pt (1668x2388 px @2x)

9.7" iPad Pro	768x1024 pt (1536x2048 px @2x)
7.9" iPad mini	768x1024 pt (1536x2048 px @2x)
10.5" iPad Air	834x1112 pt (1668x2224 px @2x)
9.7" iPad Air	768x1024 pt (1536x2048 px @2x)
10.2" iPad	810x1080 pt (1620x2160 px @2x)
9.7" iPad	768x1024 pt (1536x2048 px @2x)
iPhone 12 Pro Max	428x926 pt (1284x2778 px @3x)
iPhone 12 Pro	390x844 pt (1170x2532 px @3x)

iPhone 12	390x844 pt (1170x2532 px @3x)
iPhone 12 mini	375x812 pt (1125x2436 px @3x)
iPhone 11 Pro Max	414x896 pt (1242x2688 px @3x)
iPhone 11 Pro	375x812 pt (1125x2436 px @3x)
iPhone 11	414x896 pt (828x1792 px @2x)
iPhone XS Max	414x896 pt (1242x2688 px @3x)
iPhone XS	375x812 pt (1125x2436 px @3x)
iPhone XR	414x896 pt (828x1792 px @2x)

iPhone X	375x812 pt (1125x2436 px @3x)
iPhone 8 Plus	414x736 pt (1080x1920 px @3x)
iPhone 8	375x667 pt (750x1334 px @2x)
iPhone 7 Plus	414x736 pt (1080x1920 px @3x)
iPhone 7	375x667 pt (750x1334 px @2x)
iPhone 6s Plus	414x736 pt (1080x1920 px @3x)
iPhone 6s	375x667 pt (750x1334 px @2x)
iPhone 6 Plus	414x736 pt (1080x1920 px @3x)

iPhone 6	375x667 pt (750x1334 px @2x)
4.7" iPhone SE	375x667 pt (750x1334 px @2x)
4" iPhone SE	320x568 pt (640x1136 px @2x)
iPod touch 5th generation and later	320x568 pt (640x1136 px @2x)