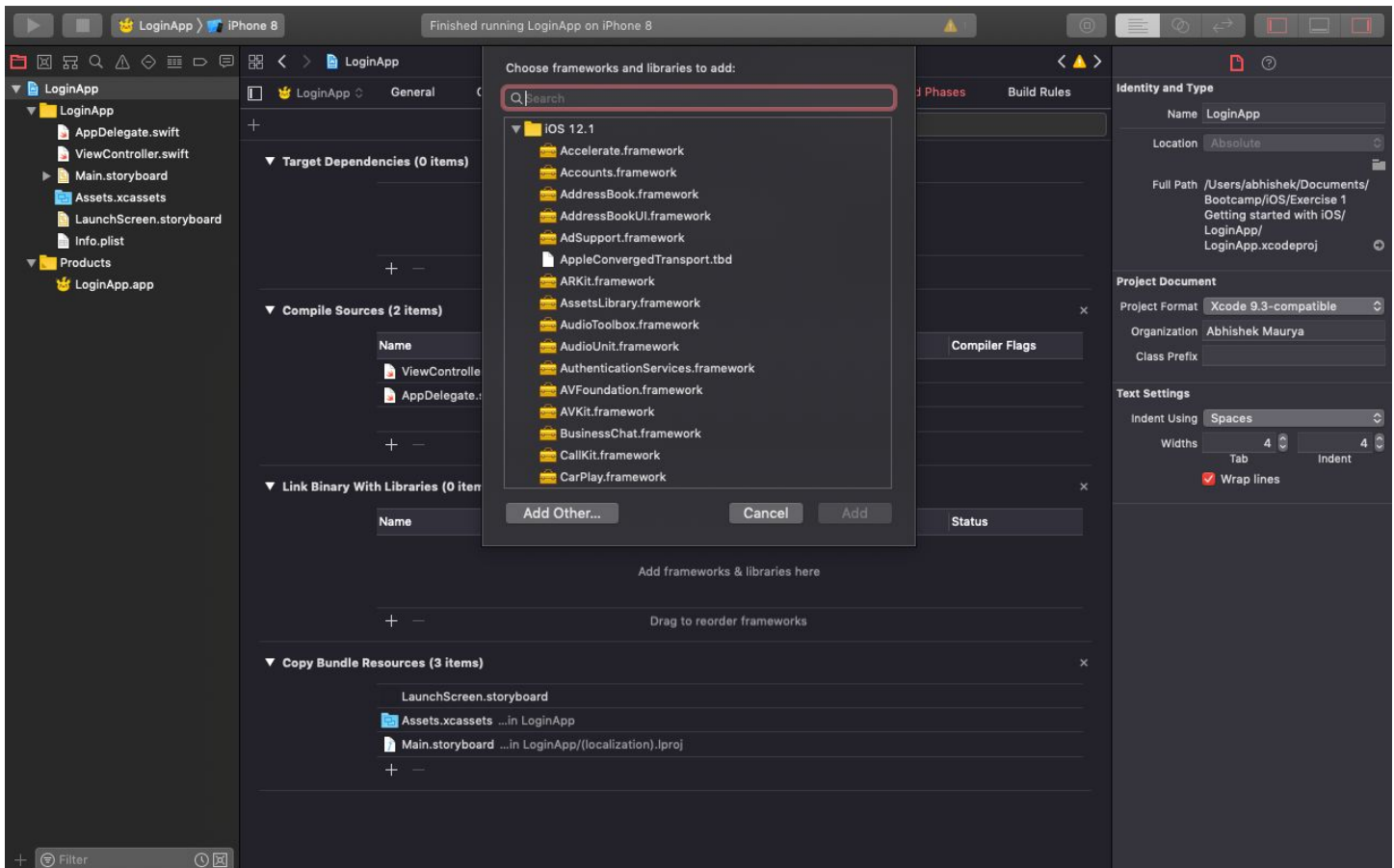# Getting started with iOS

Exercise 1

Abhishek Maurya

1. **Explain what is Xcode?**

   ● Xcode is an IDE designed by Apple for macOS, which is used to build apps for Apple eco system containing devices like iPhone, iWatch, iTV,etc.

2. **Explain how you can add frameworks in Xcode project?**

   ● Open Project **>** Build Phase **>** Link Binary with Libraries **>** Click on **+**

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

   ● Objective-C is the main language that developers write such software in. They may write bits of it in pure C, use C++ or combine it with Objective-C (producing Objective-C++), or write some or all of the program in another language entirely, such as MacRuby, Java (with j2objc), or C# (with MonoTouch).

   ● Xcode is the integrated development environment (IDE)—the application—that developers use to write software for iOS and/or OS X. It includes the editor, the build system (determining what to build to produce the desired target), and quite a few other things.

- <u>Cocoa</u> and Cocoa Touch are application frameworks. Each one is a suite of many individual frameworks.

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?**
   - Target Dependencies
   - Compile Sources
   - Link Binary with libraries
   - Copy Bundle resources

6. **Explain how appdelegate is declared by Xcode project templates?**
   - App delegate is declared as a subclass of UIResponder by Xcode project templates.

7. **Explain how you define variables in Swift language?**
   - Using `let` and `var` keywords.

     Ex: `let maxValue = 20`

     `var minValue = 5`

8. **What is interface builder?**
   - Interface builder is a part of Xcode which is used to design the interface of application using GUI elements like dragging and dropping.

9. **Create an app with a login interface which should have two text field for email, password where the password is a secure field and a button.**
   - Check same directory for LoginApp folder.

10. Add App icon to your app.
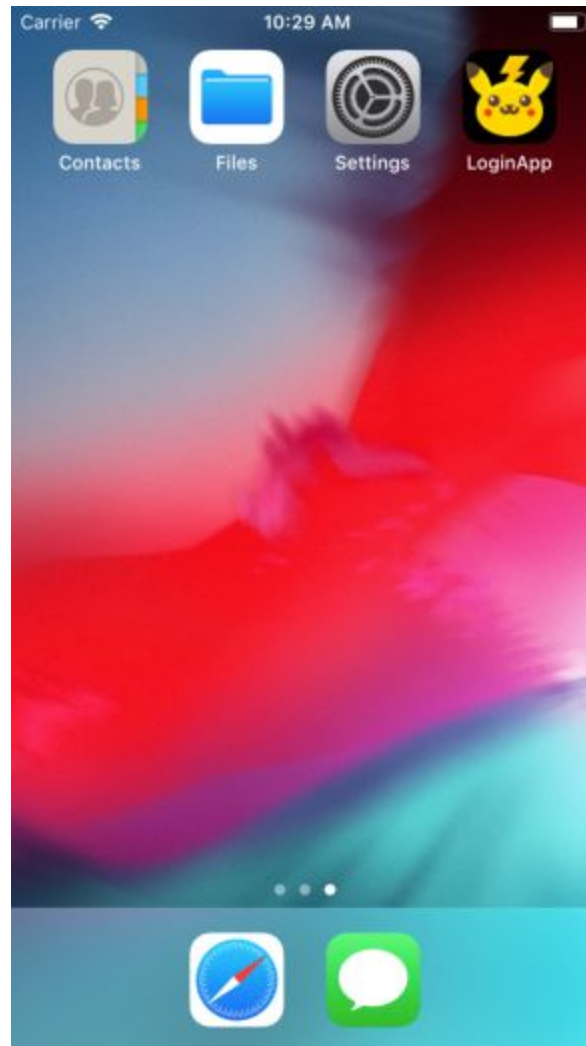
11. List devices and their resolutions, screen size has iOS as their OS.

Devices	Resolution	UI Kit Size	Scale Factor
iPhone X	1125 x 2436	375 x 812	3x
iPhone 8 Plus	1080 x 1920	414 x 736	3x
iPhone 8	750 x 1334	375 x 667	2x
iPhone 7 Plus	1080 x 1920	414 x 736	3x
iPhone 6s Plus	1080 x 1920	375 x 667	3x
iPhone 6 Plus	1080 x 1920	375 x 667	3x
iPhone 7	750 x 1334	375 x 667	2x

iPhone 6s	750 x 1334	375 x 667	2x
iPhone 6	750 x 1334	375 x 667	2x
iPhone SE	640 x 1136	320 x 568	2x
iPad Pro 12.9-inch (2Gen)	2048 x 2732	1024 x 1366	2x
iPad Pro 10.5-inch	2224 x 1668	1112 x 834	2x
iPad Pro (12.9-inch)	2048 x 2732	1024 x 1366	2x
iPad Pro (9.7-inch)	1536 x 2048	768 x 1024	2x
iPad Air 2	1536 x 2048	768 x 1024	2x
iPad Mini 4	1536 x 2048	768 x 1024	2x