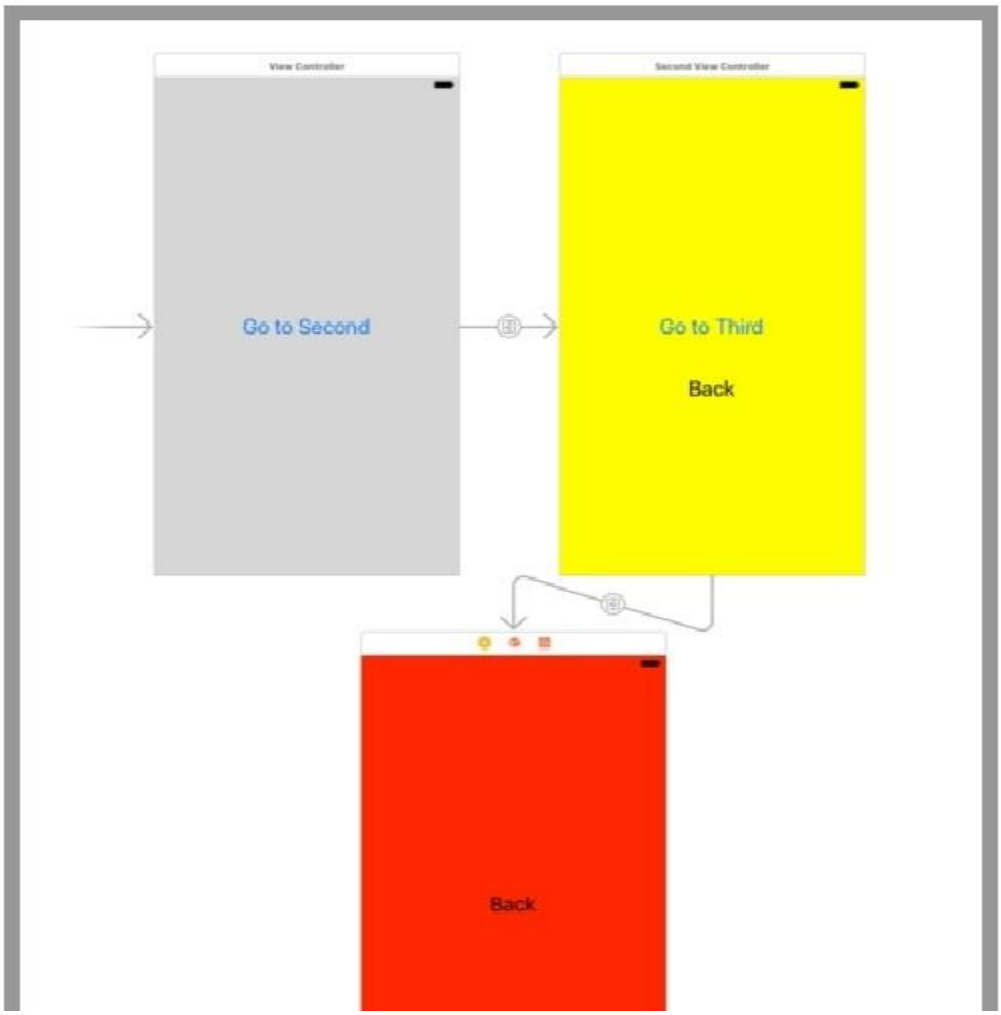
IOS ASSIGNMENT - 1

Question 1: How "prepare (for segue)" works? Provide an example that illustrates your explanation. The example could not be the class project example.

Answer: Prepare (for segue) is only used for transition between two different view controllers in development phase. It works to "prepare" the new View Controller to come on screen to be seen by the user.



Example:

Suppose we have two view controllers known as CustomerViewController and ProductViewController. The strings, like "showPhone" and "showBrand", will match a segue seeking to show the PhoneViewController or BrandViewController.

CODE:

```
OVERRIDE FUNC PREPARE(FOR SEGUE: UISTORYBOARDSEGUE, SENDER: ANY?) {
SWITCH IDENTIFIER {

 CASE "SHOWPHONE":
      LET PHONE= PHONE (NAME: “IPHONE X”)
      LET PHONEVC = SEGUE.DESTINATION AS! PHONEVIEWCONTROLLER
      PHONEVC. PHONE = PHONE

 CASE "SHOWBRAND":
      LET BRAND = BRAND (TITLE: "APPLE")
      LET BRANDVC = SEGUE.DESTINATION AS! BRANDVIEWCONTROLLER
      BRANDVC.BRAND = BRAND
   }

}
```

Question 2: An apple app is delivered in a specific format, what is the name of this format and how it works?

Answer: An Apple app is delivered to app store in “.ipa” file format actually it is a zip file that contains the compiled app inside it in an encrypted form. For example in Andorid applications there is an .apk file which compress all files and business logic combined with single archive file , in ios .ipa file od same . purpose of this specific format is to encoding ios app files for user.

Question 3: What is the difference between Classes and Objects? Protocols and Override?

CLASS:	**They Define the structure of data and how procedures or functions work for each class and have logical existence. In this when a class is created no memory space is allocated in this.**
OBJECT:	They are used to access the only information, as the information is only stored in the objects with no class. It is also known as physical existence. In this when any object is created the memory of space is allocated.
PROTOCOL:	It is a common means for different objects to communicate with each other in the system. The protocols are the definitions of methods and values with which the objects agree to cooperate with one another.
OVERRIDE:	This feature mainly describe polymorphism "One name multiple forms ", where protocol extensions don't do class polymorphism. This makes a certain sense, because a protocol can be adopted by a struct or enum, and because we wouldn't want the mere adoption of a protocol to introduce dynamic dispatch where it isn't necessary.

Question 4: Explain in your own words the apple application life-cycle.

Answer: iOS application life cycle is very simple. There are two important events such as “Application Start” and “Application Background”.

Simplest way to start an application is by clicking on its icon.

Hold State:	In this state app has not launched or system is shut down .
Inactive state :	In inactive state app start to run and loading required functions and data collection but it not accept user input or events in this state
Active state	An app in an Active state is running in the foreground and receiving events. This is the normal mode for foreground apps — apps that don’t have to run in the background without a user interface .
Background state	App in background state is not visible for user interface but it still running but it is in way to being suspended . An app may need (and request) extra execution time and may stay in this state for a time .
Suspension state	App is no longer available for user either in foreground or background and all execution processed are suspended in this state .