

## Mobile dev Quizzes (1 – 6)

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### In Swift a class ...

#### Question 1 options:

- can inherit from one class but conform to multiple protocols
- can inherit from multiple classes and conform to multiple protocols
- can inherit from multiple classes but conform to only one protocol
- can inherit from one class and conform to a single protocol

#### Correct Answer:

☒ can inherit from one class but conform to multiple protocols

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### Consider the following declaration and select the best (most complete) answer

```
swift                                                                    Copy Edit
func minMax(array:[Int])->(a:Int, b:Int)?
```

#### Question 2 options:

- the function takes an array of Ints as a parameter and returns a tuple with two Int values or a nil value
- the function takes an array of Ints as a parameter and returns a tuple with two Int values
- the function returns a tuple with two Int values or a nil value
- the function returns a Int value or a nil value

#### Correct Answer:

☒ the function takes an array of Ints as a parameter and returns a tuple with two Int values or a nil value

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The following two functions have the same type

```
swift                                                                    Copy Edit

func addTwoInts(_ a: Int, _ b: Double) -> Int {
    return a
}

func multiplyTwoInts(_ a: Double, _ b: Int) -> Int {
    return b
}
```

Question 3 options:

- True
- False

Correct Answer:



False

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In the following declaration

```
swift                                                                    Copy Edit

func pow(firstArg a:Int)->Int
```

Question 4 options:

- firstArg is the name used in the function call and a is used in the body
- a is the name used in the function call and firstArg is used in the body
- firstArg is the name used in the function call and both firstArg and a can be used in the body
- both firstArg and a is the name used in the function call and both firstArg is used in the body

Correct Answer:



firstArg is the name used in the function call and a is used in the body

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**In Swift, function is identified by**

**Question 5 options:**

- keyword func
- keyword function
- returned type with ->
- at least one parameter

**Correct Answer:**

☒ keyword func

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**Consider the following declaration and select the best (most complete) answer**

```
swift                                                                    Copy Edit

func add(no1:Int, no2:Int)->Int
```

**Question 6 options:**

- it declares a function that takes two Int values as parameters and returns an Int value
- it declares a function that takes two Int values as parameters
- it declares a function that returns an Int value
- this declaration is incorrect

**Correct Answer:**

☒ it declares a function that takes two Int values as parameters and returns an Int value

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**In the following declaration**

```
swift                                                                    Copy Edit

func swapTwoInts(_ a: inout Int, _ b: inout Int) {
    (a, b) = (b, a)
}
```

### Question 7 options:

- `_` means that when calling the function param labels has to be used
- `inout` means that params are appearing and disappearing
- `inout` means that params are input and output parameters
- `_` means that parameters are optional

### Correct Answer:

✅ `inout` means that params are input and output parameters

---

### In the following declaration

```
swift                                                                    Copy Edit

func swapTwoInts(_ a: inout Int, _ b: inout Int) {
    (a, b) = (b, a)
}
```

### Question 8 options:

- `_` means that when calling the function param labels should not be used
- `inout` means that params are appearing and disappearing
- `_` means that params are output parameters
- `_` means that parameters are optional

### Correct Answer:

✅ `_` means that when calling the function param labels should not be used

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**Swift allows for the functions to be nested (declare function in a body of another function)**

### Question 9 options:

- True
- False

**Correct Answer:**

☒ True

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**How many times will the following loop execute?**

```
swift                                                                    Copy Edit
for i in 1...10 {
    ...
}
```

**Question 10 options:**

- 5
- 9
- 10
- 11

**Correct Answer:**

☒ 10

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**What is SwiftUI?**

**Question 1 options:**

- It is an innovative way to build user interfaces using Swift
- It is a UI component defined in Swift
- It is a UI component allowing user to code in Swift
- It is a scripting language that supports Storyboard

**Correct Answer:**

☒ It is an innovative way to build user interfaces using Swift

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**What is the name of the visual tool that is used to build layouts for the iOS application as well as to define navigation and transitions between screens in the application?**

**Question 2 options:**

- storyboard
- SwiftUI
- Layout editor
- UI inspector

**Correct Answer:**

☒ storyboard

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**The origin of the UI element in iOS app is the upper-left corner**

**Question 3 options:**

- True
- False

**Correct Answer:**

☒ True

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**SwiftUI can be only used to define UI for simple applications**

**Question 4 options:**

- True
- False

**Correct Answer:**

☒ False

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**SwiftUI uses a declarative approach**

**Question 5 options:**

- True
- False

**Correct Answer:**

☒ True

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**Which of the following methods allows you to pass data from source view controller to the destination view controller?**

**Question 1 options:**

- prepare( for segue: sender:)
- shouldPerformSegue(with identifier: sender:)
- viewDidLoad()
- unwind(\_ seg:)

**Correct Answer:**

☒ prepare( for segue: sender:)

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**Which of the following methods allows you to prevent segue execution?**

**Question 2 options:**

- prepare( for segue: sender:)
- shouldPerformSegue(with identifier: sender:)
- viewDidLoad()
- unwind(\_ seg:)

**Correct Answer:**

☒ shouldPerformSegue(with identifier: sender:)

---

**If the segue looks like the following:**

**source -----> destination**

You define an unwind action method (that allows you to go back to source) in the destination view controller

**Question 3 options:**

- True

- False

**Correct Answer:**

☒ False

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**A segue is \_\_\_\_\_**

**Question 4 options:**

- a one-way connection between source and destination view controllers
- a two-way connection between source and destination view controllers
- a multidirectional connection between multiple view controllers
- this name does not have a meaning in iOS

**Correct Answer:**

☒ a one-way connection between source and destination view controllers

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**A \_\_\_\_\_ defines a transition between two view controllers in your app's storyboard file.**

**Question 5 options:**

- segue
- transition
- passage
- link

**Correct Answer:**

☒ segue

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**How can segues be executed in iOS applications?**

**Question 6 options:**

- only automatically
- only programmatically



- either automatically or programmatically
- segues are not executed, they are symbolic

**Correct Answer:**

☒ either automatically or programmatically

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**This segue displays the new content using the `showViewController:sender:` method of the target view controller.**

**Question 7 options:**

- show
- show details
- present modally
- present as popover

**Correct Answer:**

☒ show

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**This segue displays the new content using the `showDetailViewController:sender:` method of the target view controller.**

**Question 8 options:**

- show
- show details
- present modally
- present as popover

**Correct Answer:**

☒ show details

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**This segue displays the view controller modally using the specified presentation and transition styles. The view controller that defines the appropriate presentation context handles the actual presentation.**

**Question 9 options:**

- show
- show details
- present modally
- present as popover

**Correct Answer:**

✓ present modally

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**What does the following function call do?**

```
swift                                                                    Copy Edit
performSegueWithIdentifier("SomeIdentifier", sender: self)
```

**Question 10 options:**

- triggers transition defined by the segue with id SomeIdentifier
- trigger transition to the view controller with id SomeIdentifier
- trigger transition from the view controller with id SomeIdentifier
- this call is incorrect, function does not exist

**Correct Answer:**

✓ triggers transition defined by the segue with id SomeIdentifier

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**Question 1:**

What happens when a text field becomes a first responder?

Options:

- the system automatically shows the keyboard and binds the input to the text field
- the system automatically hides the keyboard and binds the input to the text field

- the system automatically hides the keyboard and unbinds the input to the text field
- the system automatically shows the keyboard and unbinds the input to the text field

Correct Answer: the system automatically shows the keyboard and binds the input to the text field

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**Question 2:**

You cannot customize the UISwitch component

Options:

- True
- False

Correct Answer: False

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**Question 3:**

Which setting changes the way in which slider send the updates to the controller (either continuously or when user done changing)?

Options:

- isContinuous
- sentWhenDone
- isDoneEditting
- isFinished

Correct Answer: isContinuous

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**Question 4:**

Which of the following can be used to display long lists of elements of the same type?

Options:

- UITableView
- UICollection
- UITextView

- UICollectionView

Correct Answer: UITableView

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**Question 5:**

Select all types of the gesture recognizers from the following list

Options:

- discrete
- continuous
- single-touch
- multi-touch
- finite
- infinite

Correct Answer: discrete, continuous

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**Question 6:**

Order the states of the gesture recognizer

Options:

- ended
- began
- changed

Correct Order (1 to 3):

1. began
2. changed
3. ended

Correct Answer: began, changed, ended

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**Question 7:**

What does it mean that a table view is a data driven view?

Options:

- it generates the content based on the data from data source
- it generates the content based on the user input
- it is controlled by a data source
- it is controlled by data entry

Correct Answer: it is controlled by a data source

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**Question 8:**

Can you set the correct value of the slider beyond the range min-max?

Options:

- Yes, but only in the storyboard/interface builder (it will update one of the ends of the range)
- Yes, but only programatically (it will update one of the ends of the range)
- No, it is not possible
- Yes, but it will cause a runtime error

Correct Answer: Yes, but only programatically (it will update one of the ends of the range)

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**Question 9:**

Which of the following functions hides the keyboard?

Options:

- resignFirstResponder
- resetFirstResponder
- resignKeyboard
- hideKeyboard

Correct Answer: resignFirstResponder

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**Question 10:**

Which of the following displays an editable text area in the interface?

Options:

- UITextField
- UILabel
- UITextView
- UITextObject

Correct Answer: UITextView

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**Permission to use location data has to be given each time the application tries to access the data**

**Question 1 options:**

- True
- False

**Correct Answer:** False

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**Which sensor is used to measure the rate at which the device rotates around a specific axis?**

**Question 2 options:**

- Gyroscope
- Accelerometer
- Rotationmeter
- Spinometer

**Correct Answer:** Gyroscope

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**What does accelerometer measure?**

**Question 3 options:**

- Change in velocity along axis.

- Gravitation
- Change in position of the device
- Change in orientation of the device

**Correct Answer:** Change in velocity along axis.

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**The values reported by the accelerometer are presented in increments of the gravitational acceleration. What does it mean?**

**Question 4 options:**

- 1.0 represents 9.8 m/s<sup>2</sup>
- 1.0 represents 1.0 m/s<sup>2</sup>
- 10 represents 9.8 m/s<sup>2</sup>
- 10 represents 1.0 m/s<sup>2</sup>

**Correct Answer:** 1.0 represents 9.8 m/s<sup>2</sup>

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**When is the permission to access the location requested?**

**Question 5 options:**

- Only on app installation
- When application starts
- Each time application wants to use location data
- When the program requests it on runtime if not permanently given before.

**Correct Answer:** When the program requests it on runtime if not permanently given before.

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**In what format is the acceleration data returned?**

**Question 6 options:**

- vector with 3 values
- vector with 4 values
- vector with 1 values

- single number

**Correct Answer:** vector with 3 values

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**How energy consumption can be minimized when using location services?**

**Question 7 options:**

- By using significant-change service
- By lowering the frequency of updates
- By quietly disabling other services
- By turning off the device

**Correct Answer:** By using significant-change service

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**Which package (module) is used to access the sensor data about motion and environment?**

**Question 8 options:**

- CoreMotion
- CoreSensors
- SensorManager
- SensorCore

**Correct Answer:** CoreMotion

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**Permission to use location data has to be checked each time the application tries to access the data**

**Question 9 options:**

- True
- False

**Correct Answer:** True

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**What is the unit of rotation used by sensors?**

**Question 10 options:**

- radian/second
- degree/second
- radian/hour
- degree/minute

**Correct Answer:** degree/second