iOS..... Assignment 1

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Note : Screenshot attached at last..

// 1. Write a Swift Program to print the value of a variable inside a text, place it in parentheses, and insert a backslash just prior to the opening parenthesis using swift language.

```
import UIKit

var greeting = "Dhwani..!"

print("Hello World.. My name is: \(greeting) ")
```

// 2. Write a Program to print constants and variables using swift language.

```
import UIKit

var greeting = "Hello, playground"

print(greeting)

let number = 31
```

```
print(number)


greeting = "Dhwani...."

print(greeting)




var name = "Dp"

name = "hii.. iOS"




// 3. You are given two numbers a and b. Compute the sum of a and b and create a string stored in a variable named formattedSum that contains the sum written like bellow:   Fora=2 and b=5 formattedSum="2+5=7"


import UIKit


var greeting = "Hello, playground"


var a = 2

var b = 5


var sum = a+b


var formattedSum="\(a) + \(b) = \(sum)"

++=
```

```
print("Formatted Sum = \(formattedSum)")



//  \a - embeds value f var a into string



// 4. Write a Program to understand Nested Loops in Swift by a program to display 7 days of 2weeks.

import UIKit

var greeting = "Hello, playground 4"

var weeks = ["monday","tuesday","wednesday","thursday", "friday","saturday","sunday"]

// for in loop
// ... close range operator create range of value
// in  indicate range
for weeks in 1...2
{
   print("7 days of 2 week: \(weeks) ")

   for days in 1...7
   {
      print("          Days of \(weeks) week: \(days)")
```

```
    }


}

// nested for loop syntax..

// outer loop --->  for i in 1...5{codes    //inner loop ---> for j in 1...2 {code}}

// ... meaning -> 1 thi ley kaya num sudhi joye




// 5. Write a Program to understand Swift while and repeat while Loop by a program to display numbers from 1 to 5.


import UIKit


var greeting = "Hello, playground"


// while

var num = 1

while num<5

{

    print(num)

    num = num + 1

}


print("    ")
```

```
// repeat while

var num1 = 10

repeat

{

   print(num1)

   num1 = num1 + 1

}

while

   num1<20
```

// 6. Define an array that contains the names “Monday”, “Tuesday”, “Wednesday”, “Thursday”, “Friday”. Use the append() method to add “Saturday” to the array. Use the += operator to add “Sunday” to the array.

```
import UIKit


var greeting = "Hello, playground"


var week = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]


week.append("Saturday")


week += ["Sunday"]
```

```
print("Days of the Week: \(week)")
```

// 7. Use a for loop to iterate through the array above, and print out each value with its index; i.e., “Day 0 is Monday”, “Day 1 is Tuesday”, etc.

```
import UIKit

var greeting = "Hello, playground"

var week = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday", "Sunday"]

for(index,days) in week.enumerated()
{
    print("Day \(index) is \(days)")
}

//enumerated --> define common type for group of related values
```

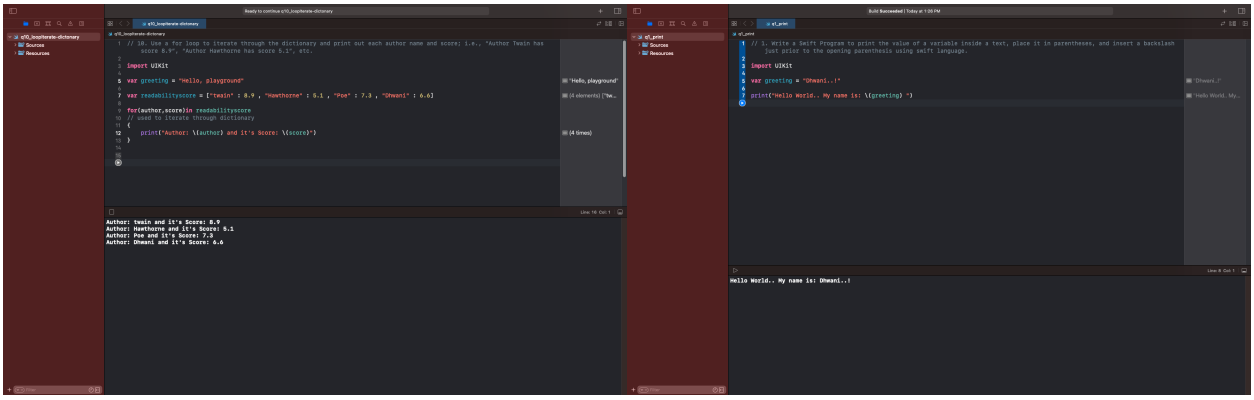
// 8. Define a dictionary containing author names and “readability score”: “Twain” 8.9 “Hawthorne” 5.1 “Poe” 7.3 Print the score for “Poe”.

```
import UIKit
```

```
var greeting = "Hello, playground"


var readabilityscore = ["twain" : 8.9 , "Hawthorne" : 5.1 , "Poe" : 7.3 , "dhwani" : 6.4]


// var poeScore = readabilityscore["poe"]


if var poeScore = readabilityscore["Poe"]
{
   print("Score for Poe: \(poeScore)")
}
else
{
   print("Not found")
}



// var without if
var dhwaniScore = readabilityscore["dhwani"]


if(dhwaniScore==0)
{
   print("Score for Dhwani: \(dhwaniScore)")
}
else
```

```
{
   print("Not found")
}




// if-elseif-else
if var dhwaniScore = readabilityscore["Poe"]
{
   print("Score for dhwaniScore: \(dhwaniScore)")
}
else if var twainScore = readabilityscore["twain"]
{
   print("Score for twainScore: \(twainScore)")
}
else
{
   print("Not found")
}



// 9. Add the author “Steinbeck” to the dictionary, with the score 6.1.


import UIKit
```

```
var greeting = "Hello, playground"


var readabilityscore = ["twain" : 8.9 , "Hawthorne" : 5.1 , "Poe" : 7.3 ]


// add

readabilityscore["Steinbeck"] = 6.1


print("Updated author Score for Steinbeck: \(readabilityscore)")




// 10. Use a for loop to iterate through the dictionary and print out each author name and score; i.e., “Author Twain has score 8.9”, “Author Hawthorne has score 5.1”, etc.


import UIKit


var greeting = "Hello, playground"


var readabilityscore = ["twain" : 8.9 , "Hawthorne" : 5.1 , "Poe" : 7.3 , "Dhwani" : 6.6]


for(author,score)in readabilityscore

// used to iterate through dictionary

{

    print("Author: \(author) and it's Score: \(score)")

}
```

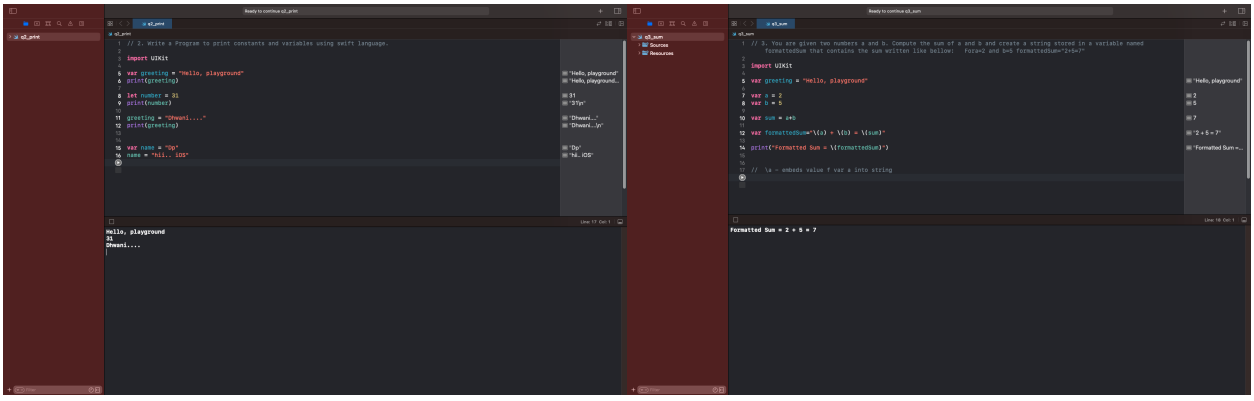


```
// 10. Use a for loop to iterate through the dictionary and print out each author name and score; i.e., "Author Twain has
    score 8.9", "Author Hawthorne has score 9.1", etc.

import UIKit

var greeting = "Hello, playground"

var readabilityscore = ["twain" : 8.9 , "Hawthorne" : 9.1 , "Poe" : 7.3 , "Dhwani" : 6.6]

for(author,score)in readabilityscore
// used to iterate through dictionary
{
    print("Author: \(author) and it's Score: \(score)")
}
```

```
Author: twain and it's Score: 8.9
Author: Hawthorne and it's Score: 9.1
Author: Poe and it's Score: 7.3
Author: Dhwani and it's Score: 6.6
```

```
// 1. Write a Swift Program to print the value of a variable inside a text, place it in parentheses, and insert a backslash
    just prior to the opening parenthesis using swift language.

import UIKit

var greeting = "Dhwani..!"

print("Hello World.. My name is: \(greeting) ")
```

```
Hello World.. My name is: Dhwani..!
```

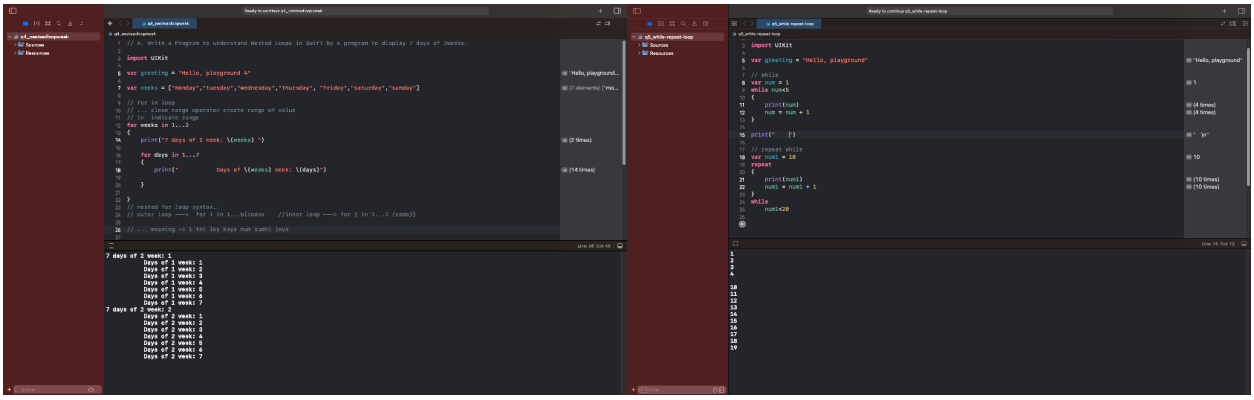


```
// 2. Write a Program to print constants and variables using swift language.

import UIKit

var greeting = "Hello, playground"
print(greeting)

let number = 31
print(number)

greeting = "Dhwani...."
print(greeting)

var name = "Dp"
name = "hii.. iOS"
```

```
Hello, playground
31
Dhwani....
```

```
// 3. You are given two numbers a and b. Compute the sum of a and b and create a string stored in a variable named
    formattedSum that contains the sum written like bellow:  Form=2 and b=5 formattedSum="2+5=7"

import UIKit

var greeting = "Hello, playground"

var a = 2
var b = 5

var sum = a+b

var formattedSum="\(a) + \(b) = \(sum)"

print("Formatted Sum = \(formattedSum)")

//  \a = embeds value f var a into string
```

```
Formatted Sum = 2 + 5 = 7
```

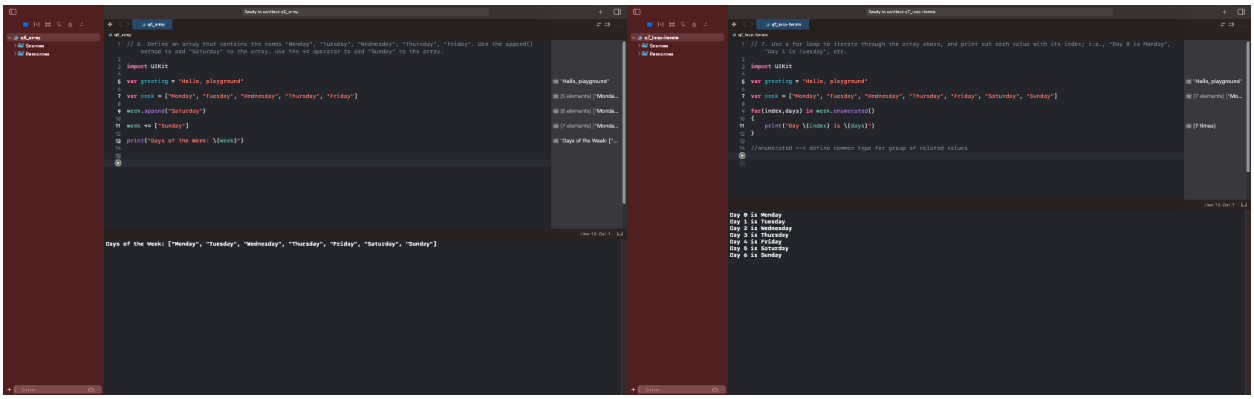


```
// 4. Write a Program to understand Nested Loops in Swift by a program to display 7 days of 2weeks.

import UIKit

var greeting = "Hello, playground +"

var weeks = ["monday","tuesday","wednesday","thursday", "friday","saturday","sunday"]

// for in loop
// ... close range operator create range of value
// ie. indicate range
for weeks in 1...2
{
    print("7 days of 2 week: \(weeks) ")

    for days in 1...7
    {
        print("          Days of \(weeks) week: \(days)")

    }
}
// nested for loop syntax..
// outer loop ---->  for i in 1...biCodes    //inner loop ----> for j in 1...2 {code}}

// ... meaning -> 1 thi ley kays num sudhi loye
```

```
7 days of 2 week: 1
          Days of 1 week: 1
          Days of 1 week: 2
          Days of 1 week: 3
          Days of 1 week: 4
          Days of 1 week: 5
          Days of 1 week: 6
          Days of 1 week: 7
7 days of 2 week: 2
          Days of 2 week: 1
          Days of 2 week: 2
          Days of 2 week: 3
          Days of 2 week: 4
          Days of 2 week: 5
          Days of 2 week: 6
          Days of 2 week: 7
```

```
import UIKit

var greeting = "Hello, playground"

// while
var num = 1
while num<5
{
    print(num)
    num = num + 1
}

print("   ")

// repeat while
var num1 = 10
repeat
{
    print(num1)
    num1 = num1 + 1
}
while
    num1<20
```

```
1
2
3
4


10
11
12
13
14
15
16
17
18
19
```



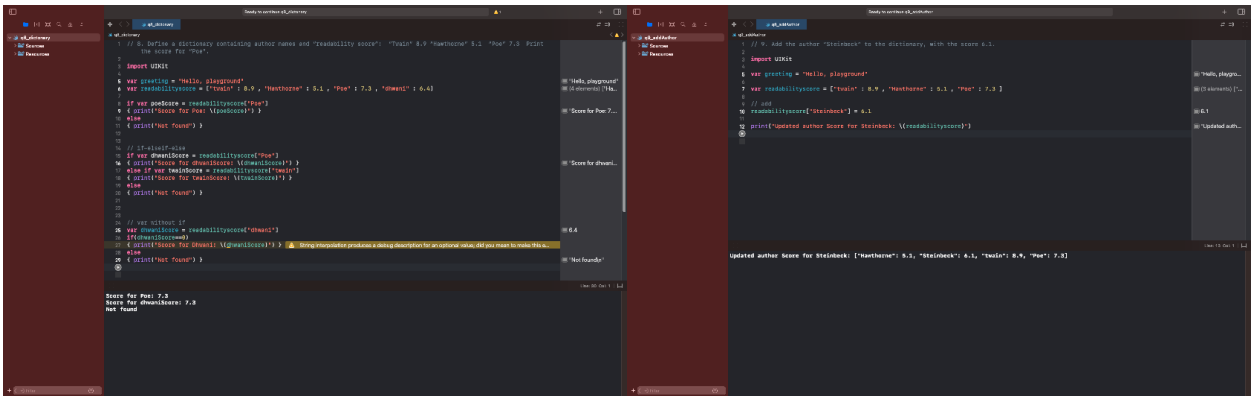
```
// 6. Define an array that contains the names "Monday", "Tuesday", "Wednesday", "Thursday", "Friday". Use the append()
    method to add "Saturday" to the array. Use the += operator to add "Sunday" to the array.

import UIKit

var greeting = "Hello, playground"

var week = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]

week.append("Saturday")

week += ["Sunday"]

print("Days of the Week: \(week)")
```

```
Days of the Week: ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday", "Sunday"]
```



```
// 7. Use a for loop to iterate through the array above, and print out each value with its index; i.e., "Day 0 is Monday",
    "Day 1 is Tuesday", etc.

import UIKit

var greeting = "Hello, playground"

var week = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday", "Sunday"]

for(index,days) in week.enumerated()
{
    print("Day \(index) is \(days)")
}

//enumerated --> define common type for group of related values
```

```
Day 0 is Monday
Day 1 is Tuesday
Day 2 is Wednesday
Day 3 is Thursday
Day 4 is Friday
Day 5 is Saturday
Day 6 is Sunday
```



```
// 8. Define a dictionary containing author names and "readability score": "Twain" 8.9 "Hawthorne" 5.1 "Poe" 7.3  Print
    the score for "Poe".

import UIKit

var greeting = "Hello, playground"
var readabilityscore = ["twain" : 8.9 , "Hawthorne" : 5.1 , "Poe" : 7.3 , "dhwani" : 6.4]

if var poeScore = readabilityscore["Poe"]
{ print("Score for Poe: \(poeScore)") }
else
{ print("Not found") }


// if-elseif-else
if var dhwaniScore = readabilityscore["Poe"]
{ print("Score for dhwaniScore: \(dhwaniScore)") }
else if var twainScore = readabilityscore["twain"]
{ print("Score for twainScore: \(twainScore)") }
else
{ print("Not found") }


// var without if
var dhwaniScore = readabilityscore["dhwani"]
if(dhwaniScore==nil)
{ print("Score for Dhwani: \(dhwaniScore)") }
else
{ print("Not found") }
```

```
Score for Poe: 7.3
Score for dhwaniScore: 7.8
Not found
```



```
// 9. Add the author "Steinbeck" to the dictionary, with the score 6.1.

import UIKit

var greeting = "Hello, playground"

var readabilityscore = ["twain" : 8.9 , "Hawthorne" : 5.1 , "Poe" : 7.3 ]

// add
readabilityscore["Steinbeck"] = 6.1

print("Updated author Score for Steinbeck: \(readabilityscore)")
```

```
Updated author Score for Steinbeck: ["Hawthorne": 5.1, "Steinbeck": 6.1, "twain": 8.9, "Poe": 7.3]
```