**44643 Mobile Computing-iOS**

**Loops:**

**// value from an array is retrieved using the index as array[index].**

**// Range Operator is a shortcut for expressing range of values.**

**// we represent range operator using (a...b) the values a and b are bounds and they are inclusive.This is closed range operator.**

**// To exclude the upper bound in a range we use Half-range operator (a..<b).**

**for loop:**

1. let number = 7

for multiplier in 1...10 {

print("\(number) x \(multiplier) = \(number \* multiplier)")

}

1. let n = 50

var sum = 0

for number in 1...n {

sum += number

}

print("The sum of the first \(n) natural numbers is \(sum)")

**The sum of first 50 natural numbers is 1275**

1. let programmingLanguages = ["Python", "Ruby", "Kotlin", "C#", "Go"]

**//In swift Array is declared using var arrayName=[]**

for language in programmingLanguages {

print(language)

}

1. let rangeLimit = 15

print("Odd numbers up to \(rangeLimit):", terminator: " ")

for number in 1...rangeLimit {

if number % 2 != 0 {

print(number, terminator: " ")

}

}

print()

1. let maxAttempts = 5

var attempts = 0

let isPremiumUser = false

for \_ in 1...maxAttempts {

attempts += 1

if isPremiumUser {

if attempts > 2 {

print("Congratulations! You've won $\(maxAttempts - 1).")

break

}

}

else {

if attempts > 4 {

print("You've won $\(maxAttempts - 4).")

break

}

}

}