Our Solution(s)   Run Code

Solution 1

```swift
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class Program {
    // O(n^2) time | O(n) space
    func threeNumberSum(array: inout [Int], targetSum: Int) -> |
        array.sort()

        var triplets: [[Int]] = []

        for i in 0 ..< array.count - 2 {
            var left = i + 1
            var right = array.count - 1

            while left < right {
                let currentSum = array[i] + array[left] + array|

                if currentSum == targetSum {
                    triplets.append([array[i], array[left], arra

                    left = left + 1
                    right = right - 1
                } else if currentSum < targetSum {
                    left = left + 1
                } else if currentSum > targetSum {
                    right = right - 1
                }
            }
        }
        return triplets
    }
}
```

Your Solutions   Run Code

Solution 1   Solution 2   Solution 3

```swift
class Program {
    func threeNumberSum(array: inout [Int], targetSum: Int) -> [
        // Write your code here.
        return []
    }
}
```

Our Tests

Custom Output   Submit Code

```
func main() {
    var program = Program()
    runTests("Test Case #") { () -> String in Void in
        var array = [3, 2, 1]
        let threeNumberSumResult = program.threeNumberSum(...)
        try assertEquals([1, 2, 3], threeNumberSumResult)
    }
    runTests("Test Case #") { () -> String in Void in
        var array = [3, 2, 1]
        let threeNumberSumResult = program.threeNumberSum(...)
        try assertEquals(..., threeNumberSumResult)
    }
    runTests("Test Case #") { () -> String in Void in
        var array = [8, 10, -2, 49, 16]
        let threeNumberSumResult = program.threeNumberSum(...)
        try assertEquals([-2, 10, 49], threeNumberSumResult)
    }
    runTests("Test Case #") { () -> String in Void in
        var array = [10, 5, 4, 3, -6, 7, -8, 0]
        let threeNumberSumResult = program.threeNumberSum(...)
        try assertEquals([-8, 1, 5], [-8, 3, 5], [-6, 1, 5], threeNumberSumResult)
    }
```

Run or submit code when you're ready.