1.

def calculate(a, b, operation) {

operation(a, b)

}

def add = { x, y -> x + y }

def subtract = { x, y -> x - y }

def multiply = { x, y -> x \* y }

println "Addition: ${calculate(10, 5, add)}"

println "Subtraction: ${calculate(10, 5, subtract)}"

println "Multiplication: ${calculate(10, 5, multiply)}"

2.

println "\nEnter a sentence:"

def sentence = System.console()?.readLine() ?: "hello world hello"

def words = sentence.split(" ")

def frequency = [:]

words.each { word ->

frequency[word] = frequency.get(word, 0) + 1

}

println "\nWord Frequency:"

frequency.each { k, v ->

println "$k → $v"

}

3.

def wordList = ["hi", "hello", "bye", "good", "sun"]

def groupedByLength = [:].withDefault { [] }

wordList.each { word ->

groupedByLength[word.length()] << word

}

println "\nGrouped by Word Length:"

groupedByLength.each { k, v ->

println "$k → $v"

}