



**ACADGILD**

# SESSION 16: R FOR BUSINESS ANALYTICS (CONTD.)

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Assignment 2

## Table of Contents

1. Introduction .....	3
2. Objective .....	3
3. Prerequisites .....	3
4. Associated Data Files .....	3
5. Problem Statement .....	3
6. Expected Output .....	3
7. Approximate Time to Complete Task .....	3

## 1. Introduction

This assignment will help you understand the concepts learnt in the session.

## 2. Objective

To understand the concepts in R.

## 3. Prerequisites

Not applicable.

## 4. Associated Data Files

N/A

## 5. Problem Statement

1. Write a function called `sum_of_cubes`, that calculates the sum of cubes of the first  $n$  natural numbers :
  - if we have two numbers : 1, 2 then sum of squares is 9 (  $1^3 + 2^3$  )
  - if we have three numbers : 1, 2, 3 then sum of squares is 36 (  $1^3 + 2^3 + 3^3$  )
2. Write a function to calculate the mode (highest frequency) of the following vector:  
`x = c(2,3,3,4,4,5,6,7,9,10)`

Write a function to calculate the no. of prime numbers of the following vector :  
`x = c(2,2,3,3,4,5,7,11,15,19,24,29)`

## 6. Expected Output

N/A

## 7. Approximate Time to Complete Task