*Session 4: Assignment 2*

**Table of Contents**

1. Introduction
2. Problem Statement
3. Output

1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

1. Problem Statement

**Problem Statement 1:**

Find the variance for the following set of data representing trees in California (heights in

feet):

**3, 21, 98, 203, 17, 9**

**Note: Solution submitted via github must contain all the detailed steps.**

**3. Output:**

Step 1: **Add** up all of the numbers:  
3+ 21 +98 + 203 + 17 + 9 = 351

Step 2: **Square** the total, and then **divide** by the number of items in the data set  
351X351 = 123201  
123201/6 = 20533.5

Step 3: Take set of original numbers from step 1, and square them individually this time. Then add them all up:  
(3x3) + (21x21) + (98x98) + (203x203) + (17x17) + (9x9) = 51633

Step 4: Subtract the value in step 2 from the value in step 3:  
51633–20533.5 = 31099.5

Step 5: Subtract 1 from the number of items in my data set:  
6–1 =5

Step 6: Divide the number in step 4 by the number in step 5:  
31099.5/5 = 6219.9

Hence [**Variance**](http://www.statisticshowto.com/probability-and-statistics/variance/)= **6219.9**