**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**

**Answer as follows:**

The above data is considered to be sample, as the heights of 6 trees in California is given, which is obviously not the total population.

Data Set: 3, 21, 98, 203, 17, 9

Ordered Set: 3, 9, 17, 21, 98, 203

Mean of the Data Set = (3 + 9 + 17 + 21 + 98 + 203) / 6 = 58.5

Variance = [ (3 – 58.5)2 + ( 9 – 58.5)2 + (17 – 58.5)2 + (21 – 58.5)2 + (98 – 58.5)2 + (203 – 58.5)2 ] / (6 – 1)

= (3080.25 + 2450.25 + 1722.25 + 1406.25 + 1560.25 + 20880.25) / 5

= 6219.9