

## Assignment 16.2

Data = 3, 21, 98, 203, 17, 9

$$\text{Variance} = \sigma^2 = \frac{\sum (x - \mu)^2}{N}$$

$\mu$  = mean of data

Step 1:-

$$\mu = \frac{3 + 21 + 98 + 203 + 17 + 9}{6}$$
$$= 58.5$$

Step 2:-

$$\text{Variance} = \frac{(3 - 58.5)^2 + (21 - 58.5)^2 + (98 - 58.5)^2 + (203 - 58.5)^2 + (17 - 58.5)^2 + (9 - 58.5)^2}{6}$$
$$= \frac{3080.25 + 1406.25 + 1560.25 + 20880.25 + 1722.25 + 2450.25}{6}$$
$$= 5183.25$$