

## Assignment :- 4

What is the value of the 99 percentile?

2, 2, 3, 4, 5, 5, 5, 6, 7, 8, 8, 8, 8, 8, 9, 9, 10, 11, 11, 12

Given :-  $n = 20$

percentile = 99

Determine the value?

According to formula:-

$$\text{index value} = \frac{\text{Percentile}}{100} \times (n+1)$$

$$= \frac{99}{100} (20+1)$$

$$= \frac{99 \times 21}{100}$$

$$= \frac{2079}{100}$$

$$= 20.79$$

∴ 20.79 is the 99<sup>th</sup> percentile index

∴ 12 is the 99<sup>th</sup> percentile value  
in given series