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

Solution:-

n = 20, percentile = 99

Formula for finding a value at a given percentile:-

$$\frac{percentile}{100} * (n + 1)$$

Putting the respective values in the equation and after calculation, we get:-

Index value = 20.79

Value at 20th index is 12 and at 21st index there is no value present. Hence we will consider only 20th index value.

Therefore, the value of the 99 percentile is 12.