

A NEW GENERALIZATION OF DOUBLE XRAMA DISTRIBUTION WITH CHARACTERIZATIONS AND ITS APPLICATIONS USING R

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ABSTRACT

In the present manuscript, we have performed a new study of double X Rama distribution termed as weighted double X Rama distribution has been explored by applying the weighted technique to its baseline distribution. The specific new distribution has been accomplished and described with different mathematical and statistical properties. Further, the parameters of introduced new distribution are also estimated by employing the technique of maximum likelihood estimation. Finally, a real lifetime data set has been fitted and analyzed in new distribution to exhibit the practical applicability and potentiality of a new distribution.

Keywords Used: Weighted Distribution, Double X Rama Distribution, Order Statistics, Reliability Measures, Maximum Likelihood Estimation.